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SOME UNHEALTHY TENDENCIES IN THERAPEUTICS *

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In the beginning I wish to express to the Section my very great appreciation of the honor paid me in the election as your Chairman for this year. As custom has directed that the Chairman shall prepare and deliver an address at the opening meeting, I have chosen for my subject a discussion of some matters that should be of great concern to all of us, rather than a discussion of a particular topic of therapeutics.

The soundest basis and the one most to be desired for all therapeutic procedures is one founded on experimental results; or, lacking in this, a method based on sound theoretic considerations. Therapeutic procedures inaugurated on any other basis than these are empiric. It should not be forgotten, however, that some of our most valued remedies were, in the beginning at least, empiric until later researches had developed an experimental basis for their continued use.

In recent years there has been manifested a very marked tendency to the use of certain agents or methods for therapeutic purposes which, unless checked, will, in the reaction that is bound soon or late to follow, have an unfortunate effect on progress in therapeutics. Many of these agents in the method of their exploitation almost force one to the conclusion that financial gain of the proposer or of the producer is the sole basis for their exploitation. Aside from the exploitation of the sick for selfish or financial considerations, the use of some of these agents (it really does not seem proper to call them remedies or treatments), on account of the possibilities for harm possessed by them, presents a question demanding immediate and serious consideration.

We know that the injection into the body of certain toxic substances may produce a certain primary reaction, but we know little of the secondary or remote effects when such substances are introduced into the circulation or are given hypodermatically. We know less about the primary effects of the introduction of many other toxic substances now used for therapeutic purposes and nothing of their secondary or remote action. No doubt many of them in their secondary effects do the body permanent harm and thus may reduce the natural resistance against disease.

These unhealthy tendencies — and I do not hesitate so to term them — in therapeutics have of late been particularly evidenced in regard to the use of certain biologic products. It has not been long since physicians were teaching that drugs given by the mouth would cure or relieve many morbid conditions, but now it seems to be the fashion to teach that in order to obtain a surer and more lasting effect it is necessary to introduce the drug into the body parenterally. This may be due in part to the extensive propaganda for the use of certain biologic preparations carried on by some of the users and manufacturers.

The mode of administration appears to have cast a spell not only over the laity, on whom a method unusual to them may be expected to have a psychologic effect, but also on some physicians who seem easily persuaded to ascribe virtue to parenteral administration of almost any preparation. It may be granted that some effect can be readily produced by subcutaneous or intravenous injection, but that this effect is of real benefit to the patient is another matter.

Some of the agents which have been put forward and for which extravagant claims have been made clearly belong in the class of preparations known as "fake remedies," while others, with but little more value on account of being similar to preparations of proved value, are not so placed. Among the number of these preparations are the Friedmann vaccine, the Duket treatment, and other preparations for the treatment of tuberculosis; solutions of rattlesnake venom for the treatment of epilepsy and many other conditions; the metabolic products of various bacteria for the treatment of rheumatism and other conditions; bacterial vaccines for the treatment of diseases of non-bacterial origin; mixed bacterial vaccines for the treatment of almost all the ills that the animal organism is subject to; mineral oil for the treatment of every form of constipation; serums for many conditions; antirabic virus for the treatment of infantile paralysis and epilepsy, and the numerous advertised or recommended "cures" for pellagra.

It may not be unprofitable to say just a few words in regard to some of the preparations just mentioned. First of all comes the Friedmann vaccine for tuberculosis, on account of the wide-spread publicity it has received and the many who had their hopes of recovery awakened only to be doomed to bitter disappointment. This proposed treatment for tuberculosis consists of a suspension of acid-fast bacilli, claimed by its introducer to have been originally obtained from a turtle infected with tuberculosis. It was claimed by its proposer to be non-virulent, non-toxic and harmless, that non-tuberculous persons and animals could be immunized against tuberculosis with it and that human cases of the disease were cured by its use.

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* Chairman's address, read before the Section on Pharmacology and Therapeutics at the Sixty-Fifth Annual Session of the American Medical Association, Atlantic City, June, 1914.

Careful and impartial investigations made by the United States Public Health Service early showed that the extravagant claims made by Friedmann were not substantiated, and later reports from many investigators have shown that the vaccine is not entirely harmless, and that the course of the disease in those treated is but little if at all favorably influenced. Indeed, evidence is accumulating that, in some cases at least, the patients have been distinctly harmed by the vaccine. It would appear that this much-advertised treatment for tuberculosis as yet presents no justification for its endorsement or use by physicians. It is to be regretted that there does not appear to be any way by which its exploitation and use in so-called "institutes" within a state can be prohibited by local health authorities, either on the ground of false pretenses or as being dangerous to the public health.

Another so-called treatment is the use of solutions of crotalin or rattlesnake venom. This preparation has been chiefly recommended for the treatment of epilepsy, but some of its proposers having very great confidence in its properties also claim that it can cure tuberculosis, and have advised its use for the treatment of lumbago, sciatica, neuritis, asthma, hay-fever, chorea, nerve exhaustion, bronchitis, neuralgia, insomnia, debility and pleurisy. From a perusal of the reports of cases treated with crotalin solutions it does not seem that the treatment is of any permanent benefit in epilepsy, and there certainly does not seem to be any evidence that it can cure the numerous other conditions for which it has been advised. There is, on the other hand, evidence of the harmfulness of the treatment, and death has been reported as a result of the use of solutions bought on the open market containing gas-forming anaerobic bacteria. It has been found that 38.8 per cent. of samples of crotalin solutions examined in the Hygienic Laboratory contained living bacteria, and that in the majority of instances the contamination was with anaerobic gas-forming bacteria similar to that found in the fatal case.

In the crotalin solutions we have a proposed treatment for conditions as unrelated as tuberculosis and epilepsy and a treatment absolutely without a suggestion of an experimental basis. While the injection of rattlesnake venom in large amounts may produce a distinct metabolic disturbance and even in small quantities cause a profound psychic impression, it does not appear that it will actually cure any disease for the treatment of which it has been proposed; but, on the other hand, there is unimpeachable evidence that it may do harm and even cause death.

The essential basis of what is generally spoken of as "vaccine therapy" is the use of the specific organism or its products, but the use of such preparations has gone far beyond this limitation. We now have it advised not only that the specific organism be used, but also that, when the specific organism is not known, a mixed vaccine or the mixed products of a number of organisms[1] be used in the hope, it is to be supposed, that one of them may exert some specific action. Bacterial therapy undoubtedly in some cases is a most valuable method of treatment; but when the claim is made that a combination of the dead bodies or the filtered products of a number of different bacteria are useful for the treatment of certain diseases with a different specific cause, it would seem that the suggestion closely approaches quackery.

1. As, for instance, Phylacogens.—Ed.

Practices such as these do more to bring bacterial therapy into disrepute than does the failure of vaccine therapy when found not to be effective in certain cases, even though scientifically applied.

It is not necessary for me to detain you longer with a discussion of the claims and value of the preparations put forward for the treatment of diverse conditions, few of which, in my opinion, have any greater justification for their use than those mentioned. But I wish to say just a few words as to the way in which these unhealthy tendencies may be checked. In the position somewhat of an outsider, I have given this question considerable thought and it has appeared to me that the situation is one for which the physician is largely responsible, and that therefore its amelioration is to a certain extent in his hands. If physicians were not so eager to listen to the claims of the proposers of new methods of treatment and to "try them out" (of course, on the poor patient) before their value had been properly demonstrated by reliable investigators, it would seem that the exploitation of unproved preparations must prove to be unprofitable and lacking economic incentive.

Aside from the doubtful practice of the indiscriminate use of unproved methods of treatment, it has seemed to me that a great injustice is done the patient by their use, since some of the preparations that have been widely exploited have been shown to be harmful in certain instances and even to have caused death. So the first step in attempting to remedy conditions is to awaken the physician to the importance of ignoring the claims of those who are pushing these new methods until their usefulness and harmlessness has been clearly demonstrated by those best in a position to do so.

The work of the Council on Pharmacy and Chemistry of the American Medical Association, while a step in the right direction, should be further elaborated by securing authoritative information from those in position to furnish it regarding the status and value of new products. The influence of the information so secured could be further augmented by teaching in the medical schools the embryo physician to hold fast to that which is proved rather than to seek those things still lacking proof.

Advances are necessary, and clinical trials must be made; but those trials should be with adequate controls of untreated cases and under circumstances in which every stage can be watched and the various clinical and laboratory observations made a matter of unbiased record and the interests of the patients guarded. It is difficult to secure these conditions outside of a well-equipped hospital. Until a new method of treatment has received abundant confirmation of this sort it is unjust — to use no stronger word — to apply it promiscuously to patients who are not under constant observation and are not amenable to instant emergency relief.

Preparations offered for sale should clearly indicate by label or otherwise whether or not the product is experimental or its value thoroughly well established. With a differentiation of this kind the physician in active practice would not be misled and would not mislead his patient into believing that thoroughly well-established measures are being applied.

The supervision of the federal government, through the Public Health Service, of the manufacture and interstate sale of biologic products has resulted in

great good in safeguarding the purity of many of the preparations and in enforcing standards of potency where such have been established; but additional authority must be given by certain amendments to the present law.

Not only sales, but also actual attempts to ship contaminated or dangerous biologic products in interstate traffic should be prohibited. This provision in the case of biologic products would be a safeguard not only to the public, but also to reputable and conscientious manufacturers.

In the case of the large class of agents which are being advocated solely for gain, and which are advertised and sold with evident fraudulent intent, not only should provision be made to exclude them and the advertising relating to them from the mails, but their shipment in interstate traffic should also be prohibited. After all, however, it devolves on the medical profession to use wise discretion in the endorsement and use of preparations, and in this respect it has a large responsibility.

RESEARCH IN OPHTHALMOLOGY, AND THE TRAINING OF OPHTHALMOLOGISTS

THEIR PROMOTION AND ENCOURAGEMENT THROUGH THE ESTABLISHMENT OF TEACHING FELLOWSHIPS *

FRANK C. TODD, M.D.
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As Chairman of the Section on Ophthalmology of the American Medical Association, it is my duty and pleasure to bid you welcome to this, our thirty-fifth annual meeting.

Permit me first to express to you my most cordial thanks for the honor you have conferred on me. The record of this Section and the distinction of my predecessors make me realize that the honor is a great one, and also cause me to feel a diffidence in assuming the office which they have so well filled.

The work of the year has largely fallen on an experienced and efficient Secretary, and it has been a pleasure to cooperate with him in the management of the Section work.

The duties connected with the position of Secretary of this Section are considerable. Not only is he expected to conduct a large correspondence and to manage the business of the Section tactfully and efficiently, but also he must devote a great deal of time and energy in its behalf. That the work of the Section for many years has been so well conducted is largely due to the interest that has been shown by our secretaries. But even though we may complacently accept such service and reward our Secretary only with appreciation and thanks, it is time that we should by some manner of means provide for the not inconsiderable expense that every Secretary of this Section has to bear. I am not here going to suggest whether or not such expenses necessary to the conduct of this part of the Association's work should be borne by the Association, but I wish to recommend that some steps be taken to remove this imposition.

* Chairman's address, read before the Section on Ophthalmology at the Sixty-Fifth Annual Session of the American Medical Association, Atlantic City, June, 1914.

THE SCIENTIFIC PROGRAM

We trust that the program will meet your approval. It has been made up largely of voluntary contributions. We have tried to follow the plan of my immediate predecessor in securing papers from those who have not often appeared on the program and have asked some of the older men who have frequently contributed to give way, which they have most obligingly done. We shall have the benefit of the judgment of many of these men in the discussion on the papers that will be presented.

SYMPOSIUM ON GLAUCOMA

It was thought wise by your officers to discuss the subject of glaucoma especially in its relation to the newer methods of operative treatment, because of the timeliness of the subject, and the report on the operations performed in this country by Lieutenant-Colonel Elliot last fall would seem to be especially worthy of study. This report has been well tabulated by Dr. Parker in his paper, which is a part of the symposium on this subject, and there will be included three other papers, one of which bears on the late infections following sclerectomy, and one on the subject of non-surgical treatment.

COMMITTEE TO INVESTIGATE NEWER METHODS OF TREATMENT OF GLAUCOMA

Like all advances, particularly of a surgical nature, the profession is liable to go to an extreme in the adoption of these newer operations for glaucoma, resulting then in a reaction when the pendulum may swing too far the other way. That a real advance has been made there is no question. It remains to be determined just what the degree of that advance is going to prove to be, and the solving of this question involves many considerations which the profession and the many suffering from this malady are impatiently awaiting. These questions are not satisfactorily answered by any one man or by several, as the result of their individual experiences. This fact is self-evident and is further borne out by the varying opinions we see expressed by those whose judgment we all respect.

It is a subject which deserves to be further scientifically investigated as soon as possible, and it can best be studied in the manner which this Section has heretofore adopted. I refer to the plan so well set forth by Dr. Wilder in his Chairman's address before this Section: that of the appointment of committees for cooperative scientific investigation of specific subjects. Such a committee carefully selected can gather the data pertaining to this new work and suggest uniform methods of recording observations, and can otherwise perform a valuable service. Their report should prove to be a guide for fellow ophthalmologists that should result in inestimable value.

FOREIGN GUESTS

It is with pleasure that I call your attention to the fact that one of our neighbors, well known by reputation to ophthalmologists of the United States, has accepted our invitation to participate in our proceedings — Dr. W. Gordon M. Byers of Montreal.

During the meeting of the International Congress of Medicine in London last summer, after a conference with many of your prominent members who were there present, an invitation was extended to Professor Axenfeld to attend and address this meeting. This

invitation was accepted. We were much disappointed when only on June 11 we received a letter from our expected guest stating that owing to the serious illness of his father, he would be unable to attend.

THE KNAPP TESTIMONIAL

At the suggestion of Drs. Posey and Bulson, ex-Chairmen of the Section, a fund has been created called "the Knapp Testimonial Fund," in honor of the late Hermann Knapp. The originators of this enterprise had in view the furthering of scientific work, and incidentally the advancement of the interests of this Section. As a direct consequence of the establishment of this fund, the Knapp Testimonial Committee has been enabled to assist in the publication of some valuable contributions, which otherwise could not have been presented before our Section. It has enabled us to secure the bound *Transactions* of the Section and the "Ophthalmic Year-Book" at a reduced price, and it has also been the means of relieving the officers of the Association and members of the Executive Committee of some incidental expenses in connection with the Section work which are not borne by the Association. Up to this time the Committee of Award has not seen fit to present the medal to any contributor, but I am happy to announce that a contribution to our program has been deemed worthy of conferring this distinction on its author and at this meeting we are to witness the first award.

THE YEAR-BOOK

The Knapp Testimonial Committee, which has helped supply the funds to pay the cost of the Year-Book, will have a report to make concerning the continuation of that valuable publication. It seems that not only have we consumers been enjoying the benefits of the gratuitous and efficient services of the editor of that publication, but also he has been obliged to make up a considerable financial deficit each year. This shows a science-loving and generous spirit on the part of the editor, but it is a condition of affairs that cannot continue, and those of us who enjoy the profits of his labors must find a way to relieve the situation. The imperative necessity of the continuance of the publication of the Year-Book would become evident the moment its publication were discontinued, and to prevent that catastrophe some decisive steps must be taken which will permit its publication without a deficit. The Knapp Testimonial Committee will offer a solution of the problem and it is hoped that the plan they propose will meet a ready acceptance. The Knapp Testimonial Fund is deserving of the support of every member of this Section, for by means of it we are enabled to promote scientific work and further the interests of this Section in a way that otherwise would not be possible. It is hoped, therefore, that the enterprise will continue to receive the hearty support of every member of this Section.

PROMOTION OF RESEARCH

There could be no worthier object than that of stimulating the development of scientific research work and the medal of award should serve as a stimulus. It is evident, however, that something more is required than reward to bring out research work and create research workers.

It would be well worth while to make a study of the various reasons why there are not more productive research workers in ophthalmology in America with a view to correcting the defect, and with a hope of increasing the number. The present methods of training do not tend to encourage the development of research workers. They do not furnish the opportunity and stimulus needed. There are unquestionably men fitted and anxious to do research work in ophthalmology who lack the means and opportunity. To provide for such men, scholarships should be created in universities equipped with the proper facilities for the carrying on of such work. This leads me to the subject on which I wish briefly to address you: the promotion and encouragement of research in ophthalmology and the systematic training of ophthalmologists through the establishment of teaching fellowships.

TEACHING FELLOWSHIPS

An opportunity for the creation of a certain number of scholarships exists in all high-grade medical schools, where suitable material is at hand for clinical experience in ophthalmology, and where other facilities requisite for proper training exist. Such universities could well employ full-time men on small salaries in the capacity of teaching fellows. The students filling such positions would thus be provided with sufficient means to pay their expenses during their entire course, such recompense increasing each year as the student becomes more valuable in the teaching department of the university. The university utilizing such students as assistants in the conduct of its ophthalmologic clinic and laboratory, and after the first year assisting in the instruction of undergraduates, will find such full-time men valuable in the conduct of the department. Such students will be more satisfactory not alone because of the fact that they will be full-time men, but also because their attention will not be diverted by the demands of private practice. Furthermore, the discipline of the department will be much better. Thus it is evident that in the adoption of such a system of teaching fellowships the university will not only thereby establish proper courses in the education of specialists, but it will also profit in the conduct and teaching in the undergraduate department.

Two universities, Michigan and Iowa, have been compelled to employ men for a period of two or three years, because of the fact that they are situated in small towns, where assistants in ophthalmology are not to be had otherwise. They have found such men useful in the conduct of the undergraduate school. In effect they have thus been training ophthalmologists in a better manner than is yet provided.

An elaboration of this plan with the provision of a systematic curriculum will afford an opportunity for more students to take such a course in certain universities with or without remuneration. Or a competition may be provided for such fellowships during the first year of the course, the better positions of the second and third year being awarded to the most deserving. It is easy to conceive of the opportunity that may exist for the development of research work in the process of such a course, and it would be highly desirable for universities offering such courses so to arrange the curriculum that encouragement may be given to those desiring to do research work.

Though only the few are cut out to do continuous and painstaking research work, many could and would be able to study out some problems if they knew how to go about it. Most men who have the inclination to undertake some original work find, as time progresses,

that their research work or scientific studies are hampered or stopped by the demands of a growing and busy practice; but it is an unfortunate fact that many do not realize the opportunity for study and research, do not see the problems which the leisure of their earlier experience might permit them to solve, until they become so busy in practice that they cannot enter on such work. It is largely the beginners, the young men in our profession, to whom we must look for such advances. During the years they are waiting to build up a practice there is so much that could be done in the line of original investigation and scientific study that those who are busy with the demands of routine practice envy them their time and opportunity.

More important still is the production of more well-trained ophthalmologists. Those who are to-day practicing ophthalmology have secured their training through serving as assistants to some busy ophthalmologist or as interns in an eye-hospital, or as a consequence of taking postgraduate courses, too often courses that are too short and inadequate.

All of these methods teach only clinical ophthalmology, and give a most deficient preparation at best in the fundamentals that should be the foundation of the preparation of a specialist in ophthalmology. Thanks to the suggestion of the late Alvin Hubbell in his chairman's address before this Section, and the more persistent efforts of Edward Jackson, we are just beginning to realize the necessity for such systematic training.

THE SYSTEMATIC EDUCATION OF THE OPHTHALMOLOGIST

It is evident that many medical students do not know their bent until after graduation, and must wait until they have served an internship in a general hospital or have tried themselves out in general practice before determining on the specialty in which they wish to engage. An ideal preparation as an ophthalmologist would seem to start during the student days of the aspirant for this highly developed and distinct specialty in the practice of medicine. From this it should not be inferred that I mean that the ophthalmologist should fail to secure the regular medical training that is required for all aspirants for the degree of Doctor of Medicine. But I do mean that should the student realize that he is later to make a specialty of ophthalmology, his course should be so shaped as to secure knowledge which will prove of greatest advantage to him in his specialty, and he should devote less time to work which is wholly irrelevant.

In whatever branch of endeavor, whether it be medicine or music, art or that of a mechanic, the earlier in life the aspirant begins his work the better, and however much benefit may be secured toward the development of a broader culture in the pursuit of subjects not related to the particular field of endeavor, the more purposeful the education, the greater will be the resulting efficiency. In this connection, and as evidence of the fact that early preparation makes better ophthalmologists, Jackson's investigations concerning the time after graduation when ophthalmologists enter on their special work are instructive. He showed that with very few exceptions successful ophthalmologists in America undertook their special preparation very early after graduation, that is, immediately or within five years after securing the M.D. degree.

Of course, the fundamental idea in the assertion that five or ten years should be spent in general practice preliminary to undertaking the study of this specialty has some merit. It lies in the acceptation of the fact that specialization is apt to lead to narrowness. There are many things a student might learn in the course of general practice which would be of benefit to him in his later practice of ophthalmology; but during such a prolonged period the student would be obliged to spend the major portion of his time in work which would be of no particular value to him later, and that which is of such value could be better learned and in a much shorter period of time in collegiate work (postgraduate, of course) under the supervision of trained teachers. During these years the student's mind and fingers are more plastic than at a later period, and it is highly desirable that the student secure his training for his life work during that period.

At present, however, all opportunities for the preparation of an ophthalmologist are at fault in the other direction. The physician preparing for this specialty now devotes his time during his preparatory course too exclusively to ophthalmology and particularly clinical ophthalmology, and does not study those other branches of medicine, which, though not ophthalmologic, are closely related to ophthalmology, a knowledge of which is necessary to acquire a proper foundation for the study and practice of ophthalmology proper. If then we are to make this change in the method of preparing an ophthalmologist, in beginning immediately or within a year after graduation from a high-grade medical school, we must supply in a concentrated form the knowledge of general medicine and the other specialties requisite to a broad understanding, that would otherwise be gained, slowly, but not so well, in a long period of general practice. It is just during these preparatory years that the physician should acquire the broader knowledge of these related subjects if he is to prepare himself properly and avoid the extreme specialization which creates narrowness. Such courses cannot well be given by ophthalmologists or in ophthalmic hospitals, but may be given most efficiently in universities properly prepared for general medical teaching. A large portion of the time during a prolonged postgraduate course would thus be devoted to such subjects and a rather definite curriculum should be laid down providing for advanced courses in the laboratory branches, namely, anatomy, physiology, pharmacology, pathology, neurology, bacteriology, etc. Later the student should have the opportunity, under the supervision of trained teachers in those subjects, to pursue the studies connected with general medicine and surgery so far as they are related to ophthalmology. Inasmuch as the subjects of otology, rhinology and laryngology are closely related to ophthalmology, and because most ophthalmologists likewise practice in diseases of the ear, nose and throat, he should have ample opportunity to pursue the study of those branches.

During the pursuit of the laboratory and correlated clinical branches he should be given an opportunity to elect certain work and should be encouraged to undertake the solving of some special problems with the hope that some, at least, of such students would become imbued with the research spirit.

The entire course in the preparation of an ophthalmologist could thus be taken in a university, or one or two years could be spent in a university, where the

student would pursue a regular, systematic course, followed by a year or more in strictly clinical work in an ophthalmic hospital. It would seem that at least two years is none too long for the systematic and thorough preparation of an ophthalmologist, and if the student is to be prepared also in ear, nose and throat, a course could be arranged covering a period of three years.[1]

This rather brief comment on the education of an ophthalmologist is not intended to be full and explicit, but rather to emphasize the importance of the work, and thus pave the way for the more detailed report of our committee on education, which will cover the entire field of the teaching of ophthalmology to undergraduates and graduates in medicine. In their report I bespeak your interest, and in this work your cooperation. The subject of the preparation of ophthalmologists and the production of research work opens up a new field of usefulness, and it is a proper function for this Section to investigate and direct such work.

RECAPITULATION

At present physicians desiring to take up ophthalmology as a specialty can look to no systematic course.

Too many undertake special work after having taken a very short course in some postgraduate medical school, and thus become incompetent and unsafe practitioners.

Others sincerely desiring to prepare themselves properly and spend sufficient time, are often unable to outline their own course properly, and find none prepared for them.

Such men usually prepare themselves clinically, but do not secure the proper laboratory training, or sufficient training in subjects correlated to ophthalmology.

The course should be carefully systematized and arranged to prepare a student properly in the fundamental laboratory and clinical branches related to ophthalmology.

An effort should be made to discover among such students natural research workers, and facilities and encouragement should be offered to promote research work.

The natural and already prepared place for such courses exists in high-grade medical schools having proper facilities for such instruction.

The entire course may be taken in such a university if sufficient clinical material is to be had, or it may be supplemented by an internship in an eye hospital. An exchange of students between universities offering such courses for short periods of time could be arranged with benefit to the students.

Degrees should be granted on the completion of thorough and satisfactory work. The requirements and the nature of the degree should be uniform in all colleges granting the degree.

1. Since writing the above I have received a copy of the report of the Committee on Diploma in Ophthalmology of the American Ophthalmological Society. This report was framed by Drs. de Schweinitz, Standish, Risley, Jackson and Weeks and makes certain recommendations concerning the character of and the requirements for a degree in ophthalmology. The standard recommended and the suggestions made are most excellent.

Industrial Insurance.—Industrial sickness insurance constitutes a logical means by which society may equitably distribute the costs resulting from physical inefficiency. No sound argument can be advanced against the propriety of establishing systems of industrial sickness insurance nor against the economic necessity for such systems.—J. W. Schereschewsky, *Public Health Rep.*

PAINLESS TUMORS OF THE SPINAL CORD *

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In 1896, at a meeting of the New York Neurological Society, I presented two cases of tumor of the spinal cord,[1] found at necropsy, in which the patients had not complained of pain. Since that time, several other examples of spinal cord tumor have come under my observation in which the characteristic root-pains were absent; and a recent review of the literature has shown that in a very considerable number of recorded cases pain is either not mentioned, or else the specific statement is made that it was slight or wanting. What the proportion is it is hard to say.

In a summary of published cases on this subject in 1904, Malaisé[2] stated that 5 per cent. of extramedullary tumors were painless; and Serko, in a recent review of the German literature,[3] found that the neuralgic state was absent in one-half of all the extramedullary tumors, and of these atypical cases 16 per cent. (intradural) and 29 per cent. (extradural) ran their course entirely or almost entirely without pain. It seems to me at present impossible to rely on published case-reports to determine what percentage of spinal cord tumors run their course without pain, since in the absence of this symptom, which is relied on more than any other for diagnosis, an operation is rarely performed, and, consequently, correct diagnosis is not reached unless a necropsy is done.

That pain may be entirely absent in cases in which the other symptoms are typical of spinal cord tumor, and in which in one way or another proof is finally offered that such tumor exists or, more frequently, existed, is no longer open to question. Since the publication of my paper in 1896, references to similar cases may be found in literature. The following is such a case, which, by reason of the absence of pain and the great curvature of the spine, was long regarded as a case of Pott's disease.

Case 1.—Intramedullary sarcoma lower cervical and upper dorsal cord. Three years' duration. No spontaneous pain. Infectious disease causes temporary recession of symptoms. Laminectomy, but removal of tumor impossible. Perfect surgical recovery.

History.—L. G., a schoolgirl of 14, entered the third division of the Neurological Institute March 28, 1912, suffering from paraplegia so profound that she was unable to stand or walk. This condition had begun three years before, during a long convalescence from measles. At first, the only difficulty was an increased fatigability in the legs and feet, with the feeling as "though she would sink or as though her feet would go out from under her." When she tried to run, or to go up-stairs, she felt pain between the shoulder-blades and in the small of the back. The motor disability progressed, and within two months of the onset she began to get awkward and would stumble and fall. The condition remained stationary until eleven months before admission (February, 1911), when the left foot began to drag; then both legs became progressively worse, so that on admission she could neither walk nor stand. At no time has there been any disturbance of the sphincters or any spontaneous pain.

Examination.—The patient is a well-nourished girl, with a right scoliosis including the dorsal vertebrae from the

* Read by title at a meeting of the American Neurological Association, held at Albany, N. Y., May 7, 1914.

1. Bailey, Pearce: Jour. Nerv. and Ment. Dis., March, 1896.
2. Malaisé: Arch. f. klin. Med., 1904, lxxx.
3. Serko: Ref. Neurol. Centralbl., 1914, No. 7.

second to the eleventh with the shortest curve from the eighth to the eleventh. She turns in bed with her back held stiff as though she were suffering, but says she has no pain and the back is not painful on pressure. The paralysis of the legs is so complete that she can hardly draw them up 2 or 3 inches in bed. The type of the paralysis is spastic with knee-jerks and ankle-jerks positive, double Babinski, Oppenheim and ankle-clonus. All the symptoms are more marked on the left. The abdominal reflexes are absent. There are no symptoms in arms or in cranial nerves. There is a corset-shaped zone of profound anesthesia for touch, less profound for temperature and pain in the distribution of the dorsal segments from the fourth to the tenth. Below this there is hyperesthesia to all forms of sensibility, still more pronounced for touch.

There has been a discharge from the ear since the attack of measles, and the day after admission the patient developed right otitis media, followed by suppurative mastoiditis which was successfully operated on by Dr. E. B. Dench. During this time she had high fever, leukocytosis and other signs of septic infection. She recovered quickly from this acute illness, and about ten days after the operation on the mastoid, began to improve in a remarkable degree. She soon could move her legs about in bed, and May 1, was able to walk with a cane; June 3, the corset zone of anesthesia had diminished in size, especially on the right side, and in lower areas, the right side showed less hyperesthesia than the left, the right abdominal reflex had returned, and the Oppenheim reflex had disappeared. The other signs were the same except hat the spines of the seventh cervical and the first dorsal vertebrae were now sensitive to pressure.

There had been a great difference of opinion on the part of the physicians of the hospital as to the neurologic diagnosis in the case, the majority voting for tuberculosis or syringomyelia, the scoliosis and the absence of pain being the determining reasons. But the magical return of function in sequence to the purulent infection of the mastoid made some of us incline very strongly to the belief that a tumor existed and had been advantageously acted on by the toxins manufactured in the ear. No operation was decided on, however; the patient was fitted with a brace, left the hospital and went home.

Second Admission.—The patient reentered the hospital Oct. 23, 1912, with the history that she had been doing well during the summer, but that in the past four weeks the difficulty in walking was getting worse. Examination of motor functions gave practically the same results as the last examinations, except that the left lower extremity was much more involved than the right. The anesthesia had increased so that now it involved both trunk and legs from the fourth dorsal segment down. There was some sensibility preserved in the sacral distribution on the right side, and in the other anesthetized areas there was some preservation of temperature and pain sensibility. A Wassermann test of the blood and cerebrospinal fluid was negative. The cerebrospinal fluid showed twenty-four lymphocytes per cubic millimeter with great excess of globulin.

Operation and Result.—The operative procedure, carried out in two stages by Dr. C. A. Elsberg, was the following: Nov. 12, 1912, the first operation showed a brownish-red tumor within a capsule, lying under laminae of the sixth, seventh and eighth cervical and first dorsal vertebrae. The tumor was intramedullary and had burst through the posterior surface of the cord (Fig. 1).

July 23, 1913, the second operation showed the tumor well extruded from the cord but still connected to it by firm infiltrations, so that it could not be removed. Sections were taken for microscopic examinations.

The patient made a rather slow recovery from the first operation (Nov. 12, 1912) owing to the fact that the wound opened and had to granulate from the bottom. Two days after the operation she said that she "could feel her legs better." The power began to return slowly in the legs and with this the sensation began to return to some degree below the knees.

One month after the first operation (Dec. 12, 1912) she could move the legs around in bed much better than formerly, but still was unable to walk or stand. Examination at this time showed little change in the motor signs except that the signs of spasticity were receding in the right leg. Sensation, however, had improved considerably. For light touch there was a corset-shaped band of anesthesia from the fourth dorsal to the first lumbar segment which extended down on the right thigh (anterior surface) for a short way. Below this there was hypesthesia about equal on the two sides. The loss of pain sensation was still less. The corset zone of analgesia extended from the fourth to the tenth dorsal segment on the left side and to the twelfth dorsal segment on the right. Below these levels the hypalgesia was of only slight degree. Temperature sense was still less affected there than for pain, as there was no true thermic anesthesia, only hypesthesia from the fourth dorsal segment down.

The muscular power gradually returned to the legs and, in the early part of January, 1913, the patient began to walk

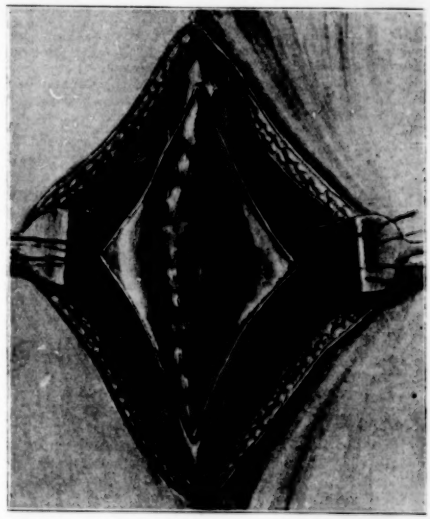

Fig. 1.—Irremovable intramedullary sarcoma of lower cervical and upper dorsal cord (Case 1). The tumor had originated within the cord substance and in its growth had burst through the posterior surface of the cord. It formed a large vascular mass on the posterior surface of the cord. Appearance of tumor after incision of the dura. Laminectomy, Nov. 12, 1912.

with the aid of two canes and later one, and when she was discharged from the hospital, Jan. 30, 1913, she walked out. While the power of her legs was increased, there was practically no change in reflexes. The corset-shaped band of anesthesia remained about the same as when last noted, and was the same for all forms of sensation. Besides this, there was an irregular stocking-shaped anesthesia of the right leg and foot below the knee, extending higher in front. Above the anesthetic area, there was now a hyperesthetic area involving both arms, and bands extending from the fourth dorsal to the fifth cervical segment. This was the first affection of sensibility in the upper extremities. On account of the obvious motor improvement, the secondary operation was postponed and the girl discharged. After her return home the patient's general condition remained about the same. She walked around the village with the aid of a cane. Occasionally she would come

to the clinic for observation and no change was noticed in her status. She remained this way until the first week of July, 1913, when she began to have some pain in the back and arms which was not continuous and did not interfere with her sleep. July 13 she had walked into the yard and sat in a chair. After sitting awhile she attempted to get up and found that she was unable to move the legs. No subjective symptoms of any sort preceded this. There was no rectal or vesical incontinence. She was returned to the hospital on a stretcher.

Third Admission.—Physical examination now showed that the former spastic paralysis had changed, so that there was a complete flaccid paralysis of the lower extremities; the knee- and ankle-jerks were absent. There was no clonus, Babinski or other plantar response. Muscular power in the arms was unchanged. Sensory examinations showed complete anesthesia to all forms of sensation of the trunk and legs from the level of the second dorsal segment down. Above this was an indefinite band of hypesthesia. There was hyperesthesia on the inner side of the arm in the distribution of the eighth cervical and first dorsal segments.

The third operation was now done. Following it the patient lost bladder control for about three weeks. After one month she could raise the right thigh about 15 degrees. Besides this there was no change in her motor status from the last examination. Sensations showed no change, except that there was possibly some return of pain sensation over both feet, fifth lumbar and first sacral nerves. She was discharged at the end of August, 1913, unimproved, and has not been seen since.

Another way in which tumors of the spinal cord may escape recognition by reason of irregularities in the manifestation of pain is that while the tumor is not entirely painless, the intervals between attacks of pain are so protracted that, when the patient comes under observation, he has either forgotten them or minimizes them to such an extent that the examiner is unable to convince himself whether pain has ever been present in a degree to indicate pressure on the posterior roots. It is, perhaps, not sufficiently recognized that in certain tumors of the spinal cord, extremely painful at some periods, long intermissions occur during which the patient may pass months of comparative comfort without any pain, and that during these periods also there may or may not be an improvement in other symptoms. In one case, reported elsewhere,[4] a patient during an interval of pain recovered sufficiently to go to Europe and thought she was cured. The following is another illustration of this:

CASE 2.—Intramedullary lesion in cervical cord. Eight years' duration. Pain intermittent and varying in location. Operation. Death.

History.—G. L., a blacksmith, aged 47, entered the third division of the Neurological Institute, Dec. 26, 1912, with paralysis of both arms and both legs. With the exception of rheumatism, there was nothing in his history to throw light on the present trouble, which had begun eight or nine years before. Stiffness of the right shoulder and numbness in the right hand had been the initial symptoms, followed by a weakness of the upper extremities, especially on the right side. The paralysis began in the upper arms, so that for a time the patient could make use of his forearms and hands by resting the elbows on the table. At this time there was a dull-aching pain between the shoulders, severe enough at times to keep him awake at night. This pain became more persistent, until one year after the onset he was much disturbed at night by cramp-like but non-radiating pains, so that his wife would iron his neck with a hot flatiron. These pains lessened as the years went on and finally disappeared, but were followed by paroxysms of severe pain and cramps in the lower extremities, which started in the hips and radiated down the legs to the knees and feet. The initial weakness in the arms was followed by weakness in the legs, so that the patient had difficulty in walking, the legs feeling heavy and difficult to lift. All the motor symptoms progressed gradually, and at the end of five years the patient was paralyzed in all four extremities, having no use of their muscles except for slight movement in the left arm. He presented a picture, then, of painless spastic paraplegia and was shown before a clinic for three consecutive years as a case of multiple sclerosis.

Examination.—This showed a large, well-developed man with the muscles of all the extremities in a state of tonic spasm, so that he lay in bed, stiff as a board, with arms and legs extended and fingers flexed, and with the feet in a position of plantar flexion. There was no spasm of the muscles of the neck, which was flexible, with some tenderness to pressure over the sixth cervical vertebra as well as over the first and second dorsal vertebrae. There remained a slight power of flexion and extension in the left arm at the elbow, and the power in both trapezii was good. There was everywhere in the paralyzed muscles an increased myotatic irritability. There was no atrophy. Anesthesia to light touch existed from the distribution of the second dorsal segment down. Cranial nerves were normal. Pain and temperature sense were lost in some degree over the same area except in the left leg, in which there was some sensation over the anterior surface and over the foot in the distribution of the fifth lumbar root. The Wassermann test in blood and spinal fluid was negative. The cerebrospinal fluid showed seven lymphocytes per cubic millimeter. Globulin was in marked excess. There was a slight incontinence of urine. There were no bed-sores.

The painful features of his illness were far from characteristic, and while with us the patient suffered no pain. In spite of that and of the long history, a diagnosis of tumor of the spinal cord was made and he was operated on twice by Dr. Alfred S. Taylor. The first operation, Jan. 1, 1913, showed a swelling on the right half of the cord, underlying the fifth and sixth cervical laminae. The lower end of this swelling was rounded and distinct to light touch, while the upper end rather faded away. This swelling was in the cord itself. The right posterior column was split longitudinally over the lower end of the swelling and left for the second operation, which was done Jan. 10, 1913. A thick gelatinous clot was found in the depth of the wound over the cord, which now had a normal appearance. What had been taken for an intramedullary growth had disappeared, possibly by extrusion. The patient survived this operation only a few days. No necropsy was permitted.

It may perhaps be an exaggeration to say that any malady which leads to such disastrous results as do tumors of the spinal cord, and in which neglect to operate is fatal, can run a course which is painless. Any disabling disease must be painful in a way. But there seem to be many cases of spinal tumor in which the pain is no more severe than it is in many other degenerative conditions, and, consequently, is of too elusive and indefinite a character to permit one to decide whether the case is one of tumor or some degenerative spinal cord disease, which is, by its very nature, not operable. Such degenerative conditions as progressive muscular atrophy, multiple sclerosis and paramyoclonus multiplex, are associated with pain in the affected muscles and limbs, feelings of discomfort, feelings of heaviness and feelings of burning; and in the following case the pain complained of was much less than may be observed in any of the conditions just mentioned:

CASE 3.—Extramedullary psammosarcoma of upper dorsal cord of six years' duration. No characteristic pains. Lamin-

4. Bailey, Pearce: The Surgical Diagnosis and Treatment of Tumors in and about the Spinal Cord, THE JOURNAL A. M. A., March 12, 1910, p. 849, Case 2.

ectomy, with removal of tumor. Perfect surgical recovery. Symptomatic improvement slight.

History.—Mrs. H., aged 28, entered the third division of the Neurological Institute, Oct. 16, 1913. She was unable to stand or walk, and had incontinence of urine. Nothing in her antecedents could be found to explain this condition. She was married in 1905, and never had children but had one miscarriage. The monthly periods were irregular but not painful. In the spring of 1907 she began to have trouble with her legs. She felt a stiffening and drawing sensation in the knees when she stood or began to walk. This was temporary and would pass off as soon as she took a few steps. A little later she felt a dull pain on the outside of the right thigh, which would come and go; she was treated for rheumatism. In the summer of that year she felt as though she could not lift her feet, and this condition gradually progressed, so that by the end of November, 1907, she began to use a wheel-chair and has never walked since. About three years ago she began to have urgency and incontinence of urine. At no time was the pain severe and it only lasted a few months. It was more a dull ache than a pain. She complains of no pain now, has lost no weight and is otherwise healthy.

Examination.—This showed a woman with a paralysis of the legs, both of which were shrunken and could not be moved by the patient. The knee-jerks were exaggerated, especially the right, and there was a slight patellar clonus. The abdominal reflexes were sluggish. There was no involvement of the arms or the cranial nerves. The back was freely flexible, without tender points. There was anesthesia in the distribution of the sixth dorsal segment. No pain was present. A Wassermann test of the blood and cerebrospinal fluid was negative. Globulin was increased. There were no cells.

In spite of the absence of pain, laminectomy was done by Dr. Elsberg, Oct. 25, 1913. Beneath the laminae of the first, second, and third dorsal vertebrae was found a light reddish tumor 2 inches long and ¾ inch thick. The tumor was extramedullary on the posterior surface of the cord, and attached firmly to the dura at the level of the second dorsal lamina (Fig. 2). The tumor was easily removed and proved to be a psammosarcoma. The cord was much flattened and as thin as tissue-paper and showed a deep depression where the growth had been. The patient recovered well from the operation and improved slightly from the anesthetic symptoms. Otherwise her condition was unchanged and she left the hospital Feb. 1, 1914.

Sometimes the pains of spinal cord tumors are masked, in that they are referred to other regions of the body which are also the seat of disease, and consequently the pain, which in reality comes from the spine itself, is believed to be due to the disease of some vegetative viscus. For example, Krauss[5] reports the case of a man ill of tuberculosis with involvement of the left lung. There were very severe pains referred to the left lung and, in spite of the fact that paraplegia was also present, it was not recognized that the lesion which caused the paraplegia was the same one which caused the pain in the lung, and which proved at necropsy to be a tumor of the dorsal region of the spinal cord.

A woman is at present under my care who three years ago had a number of abdominal operations for ectopic pregnancy. These operations, according to her story, were followed by adhesions, and a subsequent operation was undertaken for these. At the same time symptoms of colitis developed, with burning pains starting from the back and going down and across the abdomen. These pains have gradually become less and the symptoms of the colitis have disappeared, but in the past six months the patient has developed a pronounced spastic paraplegia with slight loss of sensation, but with pains no longer a conspicuous feature. After several painstaking interviews with her, I am still in the dark as to whether or not the pains complained of were directly from the spinal cord.

In the following case, the pains, which were extremely slight and inconspicuous, were for a long time referred to a floating kidney, a condition which existed and which undoubtedly, prior to coming under our observation, had been held as the cause of the pains:

CASE 4.—Intramedullary perithelioma of middorsal cord, of nine months' duration. No characteristic pains. Laminectomy, with partial removal of tumor. Death nine months after first operation.

History.—Miss A. H., a housemaid, aged 34, was admitted to the third division of the Neurological Institute, Oct. 5, 1910. Her chief complaint at that time was heaviness of the legs and thighs, with numbness and burning sensations. She gave the following history. About Christmas, 1909, she had the measles. Shortly afterward, in January, 1910, she was seized with a sudden sharp pain in the right abdominal

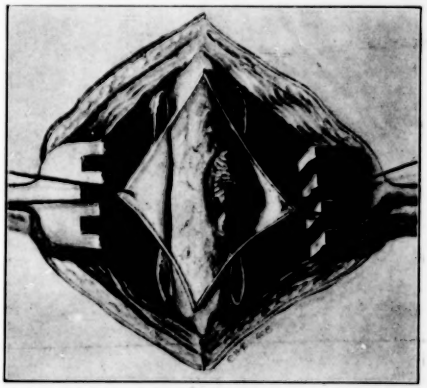

Fig. 2.—Extramedullary tumor of upper dorsal cord, six years' duration (Case 3). Laminectomy and removal, October, 1913. Appearance of tumor after the dura was incised.

region. This gave her a feeling of faintness, but there was no nausea or vomiting and the pain was relieved by the wearing of a tight corset. It continued until May or June, after which time it was not severe enough to be complained of. Physicians told the patient that she had a floating kidney, a diagnosis which was substantiated by us; but no operation for this was ever done. In February, 1910, she noticed a prickling, burning, numb sensation in the toes of the right foot. This gradually extended to the thigh and leg on the left side. At the same time there were disturbances in gait. She felt as though she walked on rough boards, and there seemed to be a ball in the center of the foot. This did not prevent her from walking and she could walk several miles without difficulty and without uncertainty in the gait or twitching, or jerking of the muscles. In March, 1910, she began to have intestinal trouble so that the ordinary stools were mixed with a thick, mucilaginous substance. She had cramps during this time, but the abdominal pains subsided in May. During June, 1910, the prickling sensations continued and the difficulty in walking increased so that she had to use a cane, and she became exhausted after she had walked ten blocks or so. Once, when trying to dodge an automobile, her knees gave out and she fell in

5. Krauss: Jour. Nerv. and Ment. Dis., April, 1910.

the road. She was frightened, and for a time could hardly walk. About the middle of September, 1910, she had to take hold of things when she walked, and her legs felt so heavy that she had to make an effort to move them along. All during this summer there was a tight feeling about the abdomen a little above the hips. She walked in the hospital, but complained of heaviness of the legs and thighs, numbness, prickling and burning sensations. Although there was no actual pain on the left side of the thigh, there was a ridge that felt like a cut. During the first few days in the hospital she became very much worse, so that she was unable to stand alone, and when she attempted it her knees gave way and she fell to the floor.

Examination.—This showed a well-nourished woman with a paraplegia of the spastic type. She was unable to stand alone, and as she lay in bed there was twitching in groups of muscles in both sides and sudden involuntary flexion of each thigh at intervals, with inability to extend the thighs voluntarily. She complained of continuous pain on the

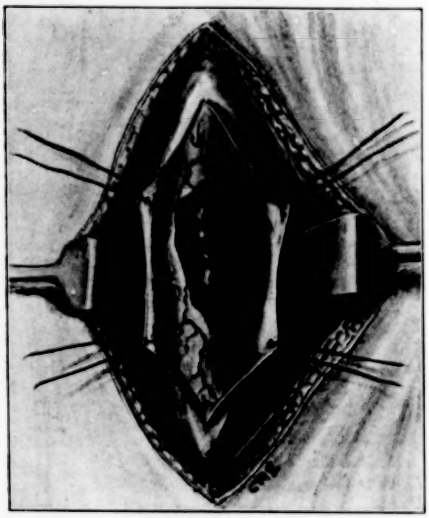

Fig. 3.—Intramedullary tumor of middorsal cord (Case 4). After incision of the cord in the posterior median septum, the hemorrhagic growth was partly extruded from the cord substance. Appearance of tumor at the second operation, Oct. 27, 1910.

outer side of the left thigh. There was no retention or incontinence of urine, but she complained of a feeling of urgency. There were no tender points over the spine and no deformity. The motor symptoms were more marked on the right side. On this side there was a slight foot-clonus, and the right patellar reflex was more marked than the left, although both were exaggerated. When she was supported her gait was spastic, although she could neither walk nor stand alone. She localized the girdle sensation pretty accurately at the dorsal level. The abdominal reflexes were absent. To light touch there was pronounced anesthesia, at the level of the tenth and eleventh dorsal segments, extending a little lower on the right side. Below this there was hyperesthesia, more marked on the right side. Also, above the band of anesthesia was a small band of hyperesthesia. The pain and temperature sensations were practically the same as the touch, except that temperature sensations appeared to be more affected than those of pain. A Wassermann test of blood and cerebrospinal fluid was negative. The cerebrospinal fluid showed no increase in pressure, and 13 lymphocytes per cubic millimeter. There was marked increase in globulin.

This case proved to be an intramedullary tumor (perithelioma), and the operative procedures by Drs. Elsberg and Beer were carried out in three stages.

Operations.—The first operation, Oct. 19, 1910, showed a tumefaction of the cord under the laminae of the sixth, seventh and eighth dorsal vertebrae. This was incised in the median line, and a dark mass about the size of an olive began slowly to extrude.

At the second operation, Oct. 27, 1910, some of this mass was removed (Fig. 3). At the third operation, March 10, 1910, most of the growth was removed. It was 2½ inches long and from ½ to ⅔ inch wide, was green and very friable. The day after the first operation there was an improvement in motor power, which continued, and the patient said that the subjective sensations were less.

After the second operation, the return of power in the legs was rapid and marked, so that by January, 1911, the patient could stand and support her weight, and in February began to walk again, with slight assistance. In the latter part of February, however, the patient began to lose ground again and soon became paraplegic, with incontinence of the bladder and rectum, symptoms which had not appeared before. Sharp pains developed now which, beginning in the lower dorsal spine, radiated down the legs. They were increased by movement.

The sensory changes which followed the operation, although very intricate and interesting, will only be indicated here. After the first operation the patient had anesthesia in the area of the tenth dorsal segment. After the second operation there was a return of touch sensation on the left side up to the eleventh dorsal segment. Temperature and pain sensation anesthesia remained unchanged. On the right side there was some return of all three forms of sensation, but not so marked as on the left. A little later, the anesthesia assumed the Brown-Séquard type, so that there was a marked loss of touch on the right side with marked loss of temperature on the left, the upper level of all remaining the same. Just before the third operation there was a deepening of the loss of sensibility to pain and temperature, while the loss of sensibility to touch remained about the same. The Brown-Séquard dissociation persisted.

Shortly after the third operation there was complete anesthesia for all sensations from the ninth dorsal segment down. There was considerable shock after the third operation, without functional motor improvement. Patient left the hospital in April, 1911, being bedridden at that time, and during the summer she died. No necropsy was made.

I take it that the relationship between trauma and spinal cord tumor is now well established. There are a great many instances in which injury to the back, in a previously healthy person, has been followed in the course of a few months by characteristic appearances of spinal cord tumor, and in many of these cases operation has been done. The occurrence of pain in such cases is interesting, for at the time of the injury to the back there is immediate pain at the point of injury, and this pain does not entirely disappear, but remains until finally it develops into the pain of a spinal cord tumor.

In a case of endothelioma of perithelial type, reported by Schlapp and Bovaird,[6] a young man injured in a football scrimmage felt intense pain between the shoulder-blades. The spontaneous pain lasted a week. Eleven months later, without the addition of shooting pains, there was pain on pressure at the point of injury and also pain referred to the same

6. Schlapp and Bovaird: Jour. Nerv. and Ment. Dis., 1911, xxxviii, 221.

place when the patient jumped or leaned over. The tumor, which was removed by operation, surrounded the cord from the seventh cervical to the third dorsal segment.

In a discussion of the general subject of pain in spinal cord tumors, it must not be forgotten that pains identical with those of irritation of the posterior roots by compression may occur in other conditions. Dr. Elsberg and I[7] have reported such a case, in which no positive diagnosis was ever made, but which was relieved by operation; and in several cases I have seen neuralgias following as a result of the withdrawal of morphin in morphin addiction, identical in symptoms with pains of spinal cord tumors.

It used to be believed that absence of pain was a definite indication that if a tumor existed it was intramedullary. This is now proved to be an error, as a great many cases of intramedullary tumor are on record in which pain has been a prominent feature; and, on the other hand, in many of the painless tumors (as in some reported here) the growth was extramedullary. Presence or absence of pain, therefore, is not to be relied on to prove that the condition is intramedullary or extramedullary, any more than it is a means of localizing the growth with respect to the circumference of the cord. We shall have to take the same position in regard to spinal cord tumors as we have taken for years in regard to tabes, that is, that pains may be absent in a disease which is usually highly painful; and that the absence of it in any case presenting other sufficient symptoms does not vitiate the diagnosis. Acceptance of this view is extremely important for the successful handling of these cases, for if we are to be held back from laminectomy by the single reason that pain is absent, we shall either lose the chance altogether of curing many patients, or shall defer the operation so long, as happened in two of the cases mentioned here, that when it finally is done the injury to the cord is past remedy and the operation serves no purpose other than a demonstrative one. The operation is not hazardous in itself.

Out of twenty-four laminectomies performed in the Neurological Institute during the year ended Nov. 30, 1913, there was only one death, and this patient died after a second-stage laminectomy for a suspected tumor of the cervical cord, a highly precarious region. Considering this slight mortality, I feel little hesitation in recommending exploratory laminectomies by skilful operators in cases in which spinal cord tumor may exist, especially in view of the fact, now established, that painlessness does not deny such existence.

My thanks are due to Dr. C. A. Elsberg for the drawings and to Dr. Elsberg and Dr. A. S. Taylor for description of the operative procedures.

52 West Fifty-Third Street.

7. Bailey, Pearce, and Elsberg, Charles A.: Spinal Decompression, THE JOURNAL A. M. A., March, 9, 1912, p. 675.

The Value of Antityphoid Vaccination.—Since the very great and almost absolute protective value of antityphoid vaccination has been proved, the fact should be promptly accepted by the medical profession, who should encourage its acceptance by the public by example, but, especially, by expression of absolute confidence. A doctor should no more question the value of antityphoid vaccination than he should question vaccination against small-pox or mosquito transmission of yellow fever or malaria.—C. C. Bass, M.D., in *Am. Jour. Trop. Dis. and Prev. Med.*

GASTRO-INTESTINAL STUDIES

I. THE QUESTION OF THE RESIDUUM FOUND IN THE EMPTY STOMACH *

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AND
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The routine examination of material from the empty stomach in the morning discloses a small pale yellowish or greenish residue, somewhat cloudy, containing mucus and a little cell débris. We are told by Loeper,[1] Zweig,[2] Kemp,[3] Wolff,[4] Strauss,[5] Riegel[5] and Soupault[5] that in health this residue should not exceed 20 c.c., and that there should be no macroscopic food-residues. It is true that occasionally the microscope discloses fat-globules, cells with their protoplasm digested and their nuclei set free, and rarely vegetable-fibers or meat-fibers, but no macroscopic residue is forthcoming.

This is the common finding with the stomach-tube, and the results recorded have gone unquestioned. Only recently Harmer and Dodd,[6] by careful Roentgen studies, pointed out that we are by no means sure that the stomach-tube reaches the lowest point of the stomach. In other words, they showed that the stomach-tube, even when it was passed through a glass tube of the size and caliber of the esophagus, has a tendency to deviate on emergence, striking the gastric mucous membrane. It then curls up so that not all the material in the stomach can be aspirated. They pointed out that the results obtained by the stomach-tube were by no means conclusive, and that gastric stasis was frequently overlooked.

Fig. 1.—Modified gastric tube.

We have been able to corroborate the statements of Harmer and Dodd in an entirely different way, incidentally throwing light on the so-called physiologic residue. One of us[7] devised a modified stomach-tube (Fig. 1) on the principle of the duodenal tube, supplying it with a special tip, which by its weight would seek the most dependent part of the stomach. The tip is slotted with large perforations, the diameter of each being equivalent to the maximum bore of the tubing (No. 8 French). This tube can be left in the stomach through the entire cycle of gastric digestion. It was in studying the normal digestion in healthy symptomless

* From the Laboratory of Physiological Chemistry of the Jefferson Medical College.

1. Loeper: Leçons de pathologie digestive, Series 2, 1912, p. 17.
2. Zweig: Magen und Darmkrankheiten, 1912, p. 459.
3. Kemp: Diseases of the Stomach, Intestines and Pancreas, 1912, p. 133.
4. Wolff: Taschenbuch der Magen und Darmkrankheiten, p. 22.
5. Cited by Loeper.
6. Harmer, T. W., and Dodd, W. J.: Sources of Error in the Use of the Stomach-Tube for Diagnosis, Arch. Int. Med., November, 1913, p. 488.
7. Rehfuss: Am. Jour. Med. Sc., June, 1914.

medical students that we were able to determine the normal residue. One of us was surprised to note discrepancies between the amount of material aspirated with the stomach-tube and the amount of material obtained with the new tube. In two instances in which the passage of the old tube failed to disclose any residue, the passage of the latter enabled us to obtain a little over 20 c.c. in one case and over 100 c.c. in the other case. The principle is therefore entirely different. The old tube is propelled from above and its position is always fixed, while the principle of the new tube is always that of gravity. The technic is described elsewhere. Suffice it to say that we aspirate while the subject is on his back, on his stomach and on each side and is breathing deeply. In this way we obtained the accompanying figures from healthy symptomless medical students, and a glance at Figure 2 will show the residuum in a straight series of nine students, the material being placed in 150 c.c. flasks.

SERIES DETERMINATION OF THE RESIDUUM OF THE EMPTY STOMACH

Case	Total Acidity	Free Acidity	Mette	Quantity, c.c.	Food Residues
48	26.0	19.5	...	57	0
50	43.5	36.0	2.5	76	0 bile
51	51.5	41.5	2.5	180	0 bile
52	35.5	21.5	2.8	97	0 bile
57	42.5	32.0	3.0	42	0 bile
58	61.5	49.0	3.2	61	0 bile
59	49.0	41.0	3.5	120	0 bile
60	41.0	39.0	2.6	60	0 bile
61	5.0	2.5	0.0	32	0 bile
62	53.0	37.5	3.5	65	0 green
63	40.5	38.0	1.5	60	0 none
64	6.5	4.0	1.0	35	0 saliva
65	6.0	0.0	1.1	30	0 saliva

None of this series was suffering in any way from gastro-intestinal disturbances, and yet we were able to obtain in every instance more than 20 c.c. of residuum and in some cases more than 100 c.c. No macroscopic food-rests were found in any of these samples, and although microscopically fat and occasionally a few vegetable fibers were found (very rarely), meat fibers were never found. In every instance the subject was examined at 8 o'clock in the morning. More than half the number contained bile, and with the exception of the last two only the slightest traces of saliva were found. It will be noted that most of the samples contained a rather high acid content and strong enzyme activity.

These results are of the greatest importance. The fact that in a straight series of healthy medical students (and care was taken to select only those who came up to this standard), we should find none from whom we could not obtain more than 20 c.c. of residuum, leads us to modify seriously our conception of the diagnostic value of the quantity of residuum.

EXPLANATION ON THE BASIS OF THE STUDIES PERFORMED BY THIS TUBE

On the same students and others we made a study of normal digestion. Briefly stated, we found that there was no single curve which could be construed as normal. We found that each individual exhibits a certain tendency in the elaboration of his secretion, and this tendency is the same, be the stimulus an Ewald meal, water or meat. In fact, we obtained exactly the same character of curve with water as with an Ewald meal, and the figures for all practical purposes were just as high. This suggested to us the fact that this substance in itself was the simplest and possibly the best test-meal. That phase of the subject will be more fully discussed in a contribution regarding the action of water in human gastric digestion.

Our normal responses fell into three types:

In the first type, which we call the "isosecretory" type, the curve rose gradually, reached a maximum, the limits of which were from 50 to 60 in terms of tenth-normal sodium hydroxid, and then gradually fell. An Ewald meal was digested in two and one-half hours.

The second type showed a rapid rise, a sustained high point and little tendency to drop even after the food had left the stomach in normal time; for some time afterward secretion poured out. This might persist for half an hour, one hour or even in pronounced cases several hours, and is called the "continued" digestive secretion in contradistinction to hypersecretion, because it occurs in almost 40 per cent. of normal symptomless persons. The figures in this type may approach 100 and over.

The "hyposecretory" type is like the first type, but the response is slower, the high point lower and less pronounced, and digestion is usually over in a little more than two hours. It is particularly in the hypersecretory type that the largest residuum is encountered,

Fig. 2.—Gastric residuum in nine normal students.

and it must be evident that a residue of 50 c.c., which is without significance in this type, may be of great importance in the other types.

WHAT IS THE CAUSE OF THIS RESIDUE?

Sokolow[8] has demonstrated that saliva, bile and pancreatic juice were all capable of calling forth the gastric secretion, but that the former is nearly always expelled at the close of a meal (Gröbbel[9]). If the Roentgen and physiologic findings demonstrate that the pyloric reflex is largely due to the action of acid on the duodenal mucous membrane, it is likely that when this ceases the pyloric mechanism is in a relaxed condition and there is a backflow of juice. We have found that the most common residue and the last to leave the stomach is fat, and this substance, even in small amounts, is capable of inducing a regurgitation of bile and pancreatic juice. Loeper[10] asserts that there is an increased molecular concentration to the residuum and that this favors spasm of the pylorus and retention. While this may be an explanation of certain pathologic residues, it scarcely holds for these findings, inasmuch as there was no pylorospasm, and bile was present in the majority of cases.

Of late, much importance has been attached to the study of the residuum or the *liquide à jeune*, as the French term it. Continental writers and statements in our text-books insist on the fact that it should not exceed 20 c.c. Rosin and Schreiber[5] alone assert that it is important only when it attains 60 c.c. or over.

8. Sokolow: Diss., St. Petersburg, 1904 (Babkin: Die Aeussere Sekretion der Verdauungsdrüsen, 1914, p. 150).
9. Gröbbel: Ztschr. f. physiol. Chem., 1914, lxxxix, 1.
10. Loeper: Leçons de pathologie digestive, 1912, p. 19.

The general feeling is that anything over 20 c.c. indicates hypersecretion, and this in turn in many cases indicates an organic lesion, nearly always ulcer. Loeper[1] gives a summary of the thesis of Sauphur in which two series, those of Rubow and those of Borjsjarg, are reviewed. The former obtained in 77 cases a residuum varying from 9 to 100 c.c.; 17 times the existence of ulcer was verified, 10 times it was clinically certain, 30 times probable. In the second series 102 patients were examined; 72 presented a distinct residuum with or without free hydrochloric acid; 52 had ulcer; 15 a stenosis, 1 cancer of the liver, another cancer of the stomach, and 2 were tabetic and tuberculous. In 30 the stomach was absolutely empty, and of these one alone had ulcer. Does this mean that ulcer is so frequent that the majority of our subjects were afflicted with that condition? Or does it even mean that some of them were predisposed to ulcer? That is utterly out of the question even though we do believe in the possibility of latent ulcer. The fact that in the second series mentioned above thirty cases showed no residuum with the old tube indicates that the old method was defective inasmuch as we found no case in which examination with the new tube failed to disclose some residuum.

These points are exceedingly important. They simply indicate that we must modify our opinion regarding the quantity of residuum and demonstrate that the old method of examination was inadequate. The fact that 20 c.c. is constantly exceeded in health lends color to the belief that the presence of food-rests is more important than the quantity of residuum. It is not our purpose to detract from the value of hypersecretion in ulcer, but simply to indicate the dangers in drawing conclusions as to the existence or nonexistence of ulcer from this symptom.

CONCLUSIONS

1. The accepted limit of the normal residuum of the empty stomach as 20 c.c. is false.
2. The examination by means of the old stomach-tube as demonstrated by Harmer and Dodd and our own experiments is entirely inadequate.
3. The method of examination by means of the new modified stomach-tube is the only satisfactory method of determining the complete residuum.
4. On a series of healthy medical students the residuum in every instance exceeded the accepted limit and in several instances was above 100 c.c. without there being any evidence of gastro-intestinal or general disorders.
5. The significance of this symptom in relation to the diagnosis of ulcer must be seriously questioned.

We wish to thank the gentlemen who kindly served as subjects in the experiments reported.

Oxypathy.—Who can count the cults? If any one of them could do what they claim to do the human race would be free from disease and the millennium would be with us. The osteopath, the chiropractic, the mechanotherapist, the Christian Scientist and the hundreds of other false believers have all failed in that they have benefited only a few and injured many. The benefit has been chiefly through suggestion and really a false benefit. In other words, they obtain an apparent relief by substituting a cult delusion for a disease delusion.—Editorial, *Old Dominion Jour. Med. and Surg.*, April, 1914.

CHRONIC OCULAR TUBERCULOSIS

NECROPSY FINDINGS IN A CASE IN WHICH DEATH WAS DUE TO TUBERCULOSIS OF THE HYPOPHYSIS CEREBRI *

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Ocular tuberculosis may be classified into at least two well-defined types, the acute and chronic. To the acute type belong the cases of solitary tubercle of the eye, diffuse tuberculosis of the choroid, acute tuberculous iritis, etc. These cases run a relatively rapid and malignant course, loss of the eye and often also death of the patient ensuing. Although this type of tuberculosis is rare, the eyes, for obvious reasons, have frequently been examined microscopically. The lesions do not differ from active tuberculous lesions elsewhere in the body, and there is no doubt that they result from direct blood metastases. To this type belongs also miliary tuberculosis of the choroid, which is usually a terminal manifestation of the systemic disease. Intermediate between cases of the acute and

Fig. 1.—Tuberculosis of the hypophysis cerebri, showing giant-cells, caseation and remains of parenchyma of anterior lobe; × 40.

chronic type of ocular tuberculosis are certain cases of tuberculous choroiditis which are also probably due to direct blood metastases.

To the chronic type of ocular tuberculosis belong the far more frequent cases of tuberculous scleritis, keratitis, chronic iritis, and cyclitis. These cases run an extremely slow course, are almost never fatal, and healing ultimately occurs, followed frequently by recurrences. Both eyes are most often involved, though not always simultaneously. In 1907 I showed by means of tuberculin tests and microscopic examinations of excised nodules that tuberculous scleritis, the most common manifestation of chronic ocular tuberculosis, is in reality identical with anterior nodular scleritis.[1] This condition had generally been designated simply as scleritis or episcleritis and regarded as rheumatic in nature. More recently, I have brought forward evidence that the lesions of chronic tubercu-

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* Read before the Section on Ophthalmology at the Sixty-Fifth Annual Session of the American Medical Association, Atlantic City, N. J., June, 1914.

1. Verhoeff, F. H.: Tuberculous Scleritis, a Commonly Unrecognized Form of Tuberculosis, Boston Med. and Surg. Jour., March 14, 1907, p. 317.

lous scleritis, keratitis, iritis, cyclitis, and sometimes, choroiditis, have the same origin, which, moreover, as will be pointed out, is essentially different from that of acute ocular tuberculosis.[2]

There are still other affections of the eye that may be due directly or indirectly to tuberculosis but concerning which our knowledge is yet highly imperfect. Thus, phlyctenulosis is generally believed to be due to sytemic tuberculosis, but on evidence that is not accepted as conclusive. Recurrent hemorrhages of

Fig. 2.—Tuberculous focus at base of right lung; × 6.

the retina and vitreous, exudative retinitis (Coats), and periphlebitis retinalis adolescentium (Igersheimer) all may prove to be manifestations of tuberculosis. It is noteworthy that these conditions in general occur at an earlier period of life than does chronic ocular tuberculosis.

Microscopic examinations of entire eyes from cases of chronic ocular tuberculosis have been few, while so far as I know a general autopsy in such a case has never been recorded.[3] The case that I have to report is therefore especially noteworthy, since not only were both eyes obtained for examination but a general autopsy was performed. It also seems to be only the third case yet recorded of death due to tuberculosis of the hypophysis cerebri.

REPORT OF CASE

J. M., married woman, aged 36, multipara, was first admitted to the Massachusetts Charitable Eye and Ear Infirmary Jan. 18, 1912, for a tuberculin test. She was readmitted Feb. 24, 1913, and discharged March 8, 1913. April 4, 1913, she was again admitted, at which time she came under my care until her death.

Ocular History and Condition.—The right eye first became affected with keratitis three years before death. This subsided after one year, leaving the vision of the right eye reduced to 20/100; it remained so for one year. The left eye then became similarly affected and soon afterward the right eye again became inflamed, after which neither eye was entirely free from inflammation. Seven weeks before death, visual acuity of the right eye was 3/200, and of the left eye 2/200. At this time the right eye was considerably congested, the cornea was vascularized, generally hazy, and showed scars of old sclerokeratitis above, and two deep interstitial opacities in inner and outer lower quadrants respectively, each about 1.75 mm. in diameter. In addition, near the limbus below there was a large nodule which projected into the anterior chamber. The left eye was almost free from congestion but showed a condition of the cornea similar to that of the right eye, with the exception of the nodule projecting into the anterior chamber. There were no nodules of scleritis visible in either eye. Each eye showed a few small posterior synechiae, but the pupils dilated fairly well under atropin. The anterior chambers were of normal depths, and the tension of each was not elevated. Fundus details could not be made out owing to the corneal opacities. Paracentesis of the cornea was done three times on the right eye, and each time was followed by noticeable clearing of the corneal haze and decrease in the congestion, but the effect was not lasting.

General History and Condition.—The general condition of the patient was good until the year of her death. Tuberculin tests made four months before death (1, 5 and 10 mg. of Old Tuberculin) gave no definite focal or general reactions, the highest temperature reached being 99.4 F. This, however, was about 2 degrees above the usual temperature, which was persistently low, averaging about 97 F. and often falling below 96 F. in the morning. A general physical examination made at the Massachusetts General Hospital, April 8, 1913, showed double mitral disease of the heart, but was otherwise negative. The anterior cervical lymph-glands were slightly enlarged. Eight months before death the menses permanently ceased. The patient had always been mentally bright and cheerful, but during her final stay in the hospital she became markedly dull and apathetic. During this time it was noted that she had polydipsia and marked polyuria, but her appetite was very poor. Examination of the urine was negative for sugar and albumin. The pulse-rate showed extreme variations, at times in the morning falling to 60 and in the evening rising to 120. Toward the end it became more constant, varying between 70 and 80 until a few days before death. The respiration rate varied between 15 and 20. The patient was habitually constipated, but about ten days before death she developed diarrhea and pain in the bowels. This confined her to bed for three days, when she improved sufficiently to walk about. The day before her death, she was attacked by still more severe diarrhea and pain, accompanied by attacks of syncope. Finally she became comatose, and died May 29, 1913. Three days before death her temperature began to rise slightly, reaching 100.5 just before death, with a pulse-rate of 110.

Necropsy.—By Dr. Verhoeff, eight hours after death.—Body that of a fairly well-nourished woman. Peritoneal and

Fig. 3.—Tuberculous scleritis; tubercle in filtration angle, and large tubercle of unusual character on posterior surface of cornea; × 10.

pleural cavities free from fluid. Pericardial cavity does not contain an excess of fluid. Lungs: On the right side the pleural cavity is partly obliterated by old adhesions extending from the base of the lower lobe. Along the anterior margin of the base of the right lower lobe immediately beneath the adherent pleura, there are three contiguous nodules each about 8 mm. in diameter, and the lung margin is here more or less thickened for a distance of 5 cm. This is evidently a tuberculous process. On section, no other evidences of tuberculosis, either old or recent, can be made out after the most careful examination. The apices are emphysematous

2. Verhoeff, F. H.: The Histologic Findings in a Case of Tuberculous Cyclitis, and a Theory as to the Origin of Tuberculous Scleritis and Keratitis, Tr. Am. Ophth. Soc., 1910, p. 566; The Experimental Production of Sclerokeratitis and Chronic Intra-Ocular Tuberculosis, Arch. Ophth., 1913, xlii, 471.

3. Hayashi (Ueber einen bemerkenswerten Fall von Tuberkulose des Auges mit Sektions-Befund, Klin. Monatsbl. f. Augenh., 1911, xlix, 274) reported a case that on clinical grounds he regarded as probably tuberculous, in which a general autopsy was performed. Inasmuch, however, as the microscopic examination of the eyes gave no evidences of tuberculosis, and no tuberculous lesions were found elsewhere, this case certainly cannot be accepted as one of tuberculosis.

only. There is marked anthracosis. The bronchial glands are pigmented and slightly enlarged, but are not caseous on section. Heart: Weight, 220 gm. Thickness of wall of left ventricle, 14 mm.; of right, 6 mm. Ventricles not abnormally dilated. The tricuspid and mitral valves are thickened and show a few old vegetations. The aortic valves are also slightly thickened. The pulmonary valves are normal. The foramen ovale is not patent. The aorta and coronary arteries are normal.

The spleen, kidneys, liver, bladder, stomach, uterus, fallopian tubes, and ovaries are normal. The mesenteric glands are in general very slightly enlarged, the largest being 1 cm. in diameter, and those beneath the diaphragm are pigmented. The solitary lymph-nodes and Peyer's patches of the intestines are abnormally large for an adult, the individual nodes measuring from 0.5 mm. to 2 mm. in size, and are unusually numerous. Otherwise the intestines are normal.

Fig. 4.—Tuberculous synechia at pupillary margin of iris; lymphoid nodule in iris stroma; × 30.

Head: The meninges are normal. The hypophysis cerebri is enlarged to about ten times the volume of a normal hypophysis, measuring 21 mm. by 18 mm. by 15 mm. It is firmly united with the chiasm which it has carried backward. The brain on section is normal. The ventricles and choroid plexus, examined with special care, are free from tubercles.

Histologic Examination.—The liver, spleen, and ovaries are normal. The kidneys show slight subacute glomerulonephritis (?). The intestines show moderate hyperplasia of the lymph follicles. The bronchial lymph-glands show the usual reaction to carbon pigment, but are not tuberculous. The mesenteric lymph-glands also show no evidences of tuberculosis.

Lung: The process at the base of the right lung shows the typical picture of tuberculosis, with foci of epithelioid and giant cells, a considerable amount of fibrin, and small areas of caseation (Fig. 2). There is notably slight lymphoid cell infiltration, and the areas of caseation are not infiltrated with pus-cells. Some of the individual tubercles consist of discrete endothelial cells situated within distended alveoli. Most of them, however, show a syncytial structure and are undergoing fibrosis. The conglomerate tubercle as a whole contains a large amount of fibrous tissue. About 16 mm. from the main process, and 3 mm. beneath the pleura, there are three minute tubercles that appear to be of relatively recent origin. The pleura over the tuberculous process and in the vicinity of the latter is not itself tuberculous, but consists of a thick layer of fibrous tissue containing in places large masses of adipose tissue. The lung tissue beneath the thickened pleura shows, in addition to the tuberculous process, the usual changes associated with anthracosis, and is emphysematous.

The hypophysis cerebri has been converted into a large tubercle of the fibroid type with a central caseous center about 5 mm. in diameter. Not a single area of non-tuberculous hypophyseal tissue can be found anywhere, but remains of the acini of the anterior lobe are scattered here and there (Fig. 1). Small discrete tubercles are numerous. These always consist of a syncytium of endothelial cells often containing Langhans' giant-cells, and many of them show caseation. The large central area of caseation and the smaller areas as well are free from purulent infiltration but contain an abundance of reticulated fibrin. Lymphoid cell infiltration in general is slight, but in places is fairly marked. From the hypophysis the tuberculous process has slightly invaded the chiasm. The latter also shows interstitial infiltration with lymphoid cells and an occasional deeply seated tubercle. The infundibulum is normal except at its junction with the hypophysis, where it shows an inflammatory reaction.

PATHOLOGIC EXAMINATION OF THE EYES

Both eyes were removed at autopsy and opened by equatorial section. The right eye was fixed in 10 per cent. liquor formaldehydi, but before it was placed in this solution a piece of the ciliary body, as described below, was removed for animal inoculation. The left eye was fixed in Zenker's fluid.

Right Eye.—The globe is normal in size and shape. The cornea shows the scars already noted clinically. The nodule projecting into the anterior chamber from the cornea is ovoid in shape, situated parallel to, and 1.5 mm. from the canal of Schlemm, and measures 1 mm. by 1.5 mm. by 4 mm. in size. The anterior chamber is free from coagulum. The lens is *in situ* and clear. There is complete peripheral anterior synechia. The pupil, 4 mm. in diameter, shows six delicate posterior synechiae. The vitreous humor is of normal consistence, and clear in its posterior portion. In its anterior portion it shows a number of dots scattered within it. The largest of these, about 1 mm. in diameter, are twelve in number. The ciliary body shows four white spots irregular in shape, situated just behind the ciliary processes. Three of these are below, 2 mm. apart, the largest being 2 mm. in diameter. The other 0.75 mm. in diameter, is on the nasal side. The choroid and retina are *in situ* and normal. The optic disk is not cupped.

Histologic Examination of Right Eye.—For a distance of about 3 mm. from the limbus above, the cornea has been converted into vascularized scar tissue, but it here contains no definite tuberculous foci. The central portion of the cornea is relatively normal, but shows occasional vessels in its posterior layers. Near the center, an old non-vascular scar is found just beneath Bowman's membrane. The epithelium is everywhere intact. Bowman's membrane is also intact except over the scar near the limbus above, where it has been destroyed in places. Descemet's membrane and the endothelium are normal except at the site of the nodule below. This nodule (Fig. 3) is found to be a large tubercle that has involved the posterior layers of the cornea only to a depth of five or six lamellae. Some sections show curled fragments of Descemet's membrane carried into the cornea by the tubercle. The structure of the tubercle is unusual. Within the cornea and at its base it is composed of epithelioid and giant-cells as is usual, but its greatest mass, lying within the anterior chamber, is composed largely of fibrin. The fibrin is covered with a thick layer of fibroblasts, and the latter are also invading it from the base. It is thus evident that

Fig. 5.—Tuberculous focus involving surface of ciliary body. The epithelium has been broken through. Macroscopically this appeared as a white spot about 1.5 mm. in diameter; × 50.

the large size and unusual structure of the tubercle is due to the deposition of fibrin on a tuberculous focus primarily involving the inner surface of the cornea. Whether this focus originated inside or outside of Descemet's membrane it is now impossible to determine.

Filtration Angle: This is blocked by the root of the iris all around, and almost every section shows it to contain one or more small tuberculous foci, most of which are in various stages of fibrosis (Fig. 3). Sometimes a focus is seen extending into the cornea beneath Descemet's membrane.

Sclera: In the vicinity of the limbus above, the sclera is abnormally vascularized and largely replaced by fibrous tissue continuous with that of the cornea (old sclerokeratitis). In addition, it shows marked perivascular infiltration with lymphoid cells and a number of small stretched out areas of epithelioid cells, usually in the middle layers. Below, the sclera is less cicatrized, and here also shows tuberculous foci (Fig. 3). These are more active or recent than those above, and one of them, composed largely of discrete endothelial cells, is almost in contact with the conjunctival epithelium.

Fig. 6.—Tuberculous focus involving only the epithelium of the ciliary body. A giant-cell is present; × 50.

Iris: The iris shows diffuse infiltration with chronic inflammatory cells, chiefly lymphocytes, and also numerous sharply defined lymphocytic nodules. The latter contain no germinal centers as do true lymph follicles. Attached to the pupillary margin in places there are minute wedge-shaped foci of epithelial cells—tuberculous posterior synechiae (Fig. 4).

Ciliary Body: In general, the ciliary body is almost normal. It shows only slight lymphocytic infiltration, but is giving off a considerable number of lymphocytes from its surface. In places there is slight proliferation of the pars plana ciliaris retinae. The white spots on the pars plana are found to be localized tuberculous foci involving chiefly the surface (Figs. 5 and 6). They consist of delicate avascular hyaline tissue in which more or less circumscribed areas of epithelioid cells occur. Each is intimately connected with the epithelium, which is greatly altered beneath it. In some places the epithelium is almost completely destroyed by foci of epithelioid cells which have penetrated it and slightly involved the underlying stroma. In other places its two layers are split apart. In the upper part of the eye a small tuberculous focus is

Fig. 7.—Minute tubercle composed of endothelial cells, on surface of ciliary body; × 195.

found beneath the intact epithelium over which there is no tuberculous process. This focus also differs from the others in the fact that it is surrounded by a marked lymphocytic infiltration.

Vitreous Humor: The white dots are found to be tubercles, free from caseation, composed of epithelioid cells (Fig. 8).

Choroid: This is normal.

Retina: So far as can be determined the retina is normal. The ganglion cells are present in normal numbers but show post-mortem changes.

Optic Nerve: The optic disk is not definitely cupped, but the lamina cribrosa is curved backward, and there are small cavernous spaces just in front of it. The myelin sheath stain shows no atrophy of the nerve stem.

Left Eye.—This is also normal in size and shape. The anterior chamber is free from coagulum. There is complete peripheral anterior synechia. The lens is *in situ* and clear. The ciliary body shows one minute white spot on the pars plana ciliaris, but is otherwise apparently normal. The vitreous humor is free from tubercles and otherwise normal. The retina and choroid are *in situ*, and normal. The optic disk is not cupped.

Histologic Examination of Left Eye.—The left eye shows changes that differ only in degree from those in the right. The older lesions, represented by scars in the cornea and sclera, are less well marked. Some of the old foci in the filtration angle, however, have become almost completely converted into hyaline tissue and thus show further retrogression than any corresponding foci in the right eye. The active tuberculous foci, both within the filtration angle and elsewhere, are more recent than those in the right eye, as indicated by the fact that the cells are more discrete. Numerous active foci are found in the anterior sclera both above and below, and a small one especially active is found just beneath the epithelium at the limbus. One active focus is seen in the cornea situated immediately beneath Descemet's membrane. Active foci are also found within and beneath the hyaline tissue in the filtration angle from which they sometimes extend into the cornea. The iris shows numerous tuberculous synechiae, and in addition small tubercles within the stroma near the pupillary margin. The iris is free from the

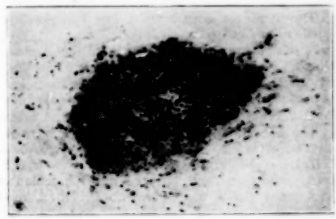

Fig. 8.—Small tubercle in anterior part of vitreous humor; × 145.

lymphocytic nodules seen in the right eye. In fact, the eye as a whole shows much less lymphocytic infiltration than the right eye.

The ciliary body shows a few small recent foci on its surface, but none of such size or so old as those in the right eye. Below there is a minute tubercle 0.1 mm. in size, composed of discrete endothelial cells adherent to the pars plana (Fig. 7). In another place there is a disk-shaped nodule 0.4 mm. in diameter on the surface of the pars plana, while beneath the epithelium there are two small tubercles. In still another place there is a small tubercle in the stroma that is just beginning to invade the epithelium.

The retina, choroid, and optic nerve are free from tuberculous foci and present the same appearance as in the right eye.

BACTERIOLOGIC EXAMINATION

Numerous sections stained for tubercle bacilli show no bacilli in the lesions of the eyes, hypophysis, or lungs. Spreads from the tubercles of the vitreous humor, made before fixation, are also negative for bacilli. A piece of the ciliary body from the right eye, containing the largest one of the tuberculous foci, was introduced into the anterior chamber of a rabbit's eye. This adhered to the surface of the iris but was completely absorbed without producing tuberculosis.

Pathologic Diagnosis.—Tuberculosis of the hypophysis cerebri. Old pleural adhesions. Small conglomerate tubercle, base of right lung. Old endocarditis. Hyperplasia of lymph follicles of intestines. Chronic bilateral tuberculous scleritis, keratitis, iritis and cyclitis. Tubercles of the vitreous humor.

In spite of the inconclusive tuberculin test and the negative bacteriologic findings, there can be no doubt that this was a case of tuberculosis. The lesions in the lung, hypophysis, and eyes were typical, mutually corroborative, and incapable of any other interpretation. Moreover, the ocular history and clinical picture were perfectly characteristic of chronic ocular tuberculosis.

This case proves, so far as it is possible for a single case to do so, that complete destruction of the hypophysis cerebri is incompatible with life, for there can be no doubt that death was due to loss of function of the hypophysis resulting from its complete tuberculous involvement, since at autopsy no other cause for death could be found. In other words, this was an extreme case of hypopituitarism. Unfortunately, this fact was not recognized during the life of the patient, and the case was not treated or investigated from this point of view. Some of the more important clinical symptoms, however, were noted. These were the cessation of the menses eight months before death, polyuria and polydipsia, and marked mental dulness. There was not undue adiposity, though the amount of subcutaneous fat was greater than would have been expected in view of the little nourishment the patient could be induced to take. The persistent low temperature was characteristic of hypopituitarism, but was equally so of chronic ocular tuberculosis. The terminal symptoms of hypopituitarism have not been described in a series of cases, so that whether or not those observed in this case can be regarded as characteristic is uncertain. The attacks of syncope and the gradual onset of coma might have been expected. The diarrhea and abdominal pain, both probably due to exaggerated peristalsis, beginning ten days before death, were perhaps analogous to the hiccoughs of Addison's disease.

CASES IN LITERATURE

In the literature I have been able to find reports of only eight cases of hypophyseal tuberculosis, none of which was associated with ocular involvement.

Hueter[4] and Heidkamp[5] describe one case each of generalized tuberculosis with death from tuberculous meningitis, associated with tuberculosis of the hypophysis. In Sommer's[6] case—this was also one in which death occurred from tuberculous meningitis—the hypophyseal involvement was probably by extension from tuberculosis of the sphenoid bone. In the case of Lancereaux[7], death was due to pulmonary and intestinal tuberculosis, and the hypophysis was found enlarged to double normal size and pervaded by miliary granulations. The case of Lucien and Parisot[8] was one of diabetes mellitus with death from subarachnoid hemorrhage, in which old pulmonary tuberculosis and miliary tuberculosis of the hypophysis were found. In Beck's[9] case, in which death was due to sepsis, the hypophysis had been converted into a large encapsulated tubercle, and there were no other evidences of tuberculosis.

Wagner's[10] case was that of a scrofulous girl aged 13, with ozena, slight glandular swelling, and attacks of conjunctivitis. There was sudden onset of convulsions followed by coma and death within six hours. At autopsy the hypophysis was found completely converted into a tubercle. There were no other tuberculous lesions, but the right lung showed extensive pleural adhesions. (Hueter regarded this case as probably one of gumma of the hypophysis.)

In the case of Haushalter and Lucien,[11] the patient was a girl aged 6½ years. There was marked polyuria and polydipsia, but the urine was free from albumin and sugar. The child was in good spirits. The temperature was never above normal; the pulse-rate was 100. The skin was rough and dry. There was sudden onset of convulsions which lasted fifteen minutes, followed by coma and death. At autopsy the tuber cinereum was found replaced by a large tubercle which had extensively involved the hypophysis by way of the infundibulum. No tubercle bacilli could be found. There was a caseous gland the size of an almond to the right of the trachea and a fibrous tubercle at the apex of the right lung. The latter also showed adherent pleura posteriorly.

In only the last two of these cases could death be attributed to the involvement of the hypophysis. In both, as in my case, death occurred suddenly and unexpectedly. In both there were convulsions, however, whereas in my case these were absent. This may have been due to the fact that these cases were in children in whom convulsions readily occur, or to the fact that the destruction of the hypophysis was more rapid than in my case. Only in the case of Haushalter and Lucien were diabetes insipidus and polydipsia noted, but it is possible that they were present in some of the other cases and overlooked.

The question of the relation of simple polyuria to lesions of the hypophysis is a complicated one. Schafer and Magnus have shown that the injection of extracts of the posterior lobe into animals produces temporary polyuria. Cushing's[12] researches also indicate that polyuria of hypophyseal origin is due to involvement of the posterior lobe, but his experiments are apparently contradictory as to whether it results from overactivity or underactivity of the latter. Thus he finds that manipulation of this lobe produces temporary, whereas its complete removal causes prolonged polyuria. The present case, as well as that of Haushalter and Lucien, would seem to prove that depressed activity of the hypophysis may cause polyuria. This is supported by the fact that clinical observations show that simple polyuria is associated with symptoms of hypopituitarism rather than with those of hyperpituitarism. Possibly the relatively transient polyuria that results from a sudden excess of pituitary secretion in the blood may be produced in an entirely different way from that of the persistent polyuria of hypopituitarism.

An interesting question concerns the possible relationship, in the present case, of the hypophyseal, pulmonary, and ocular lesions. Judging by the time of onset of clinical symptoms, the duration of the ocular tuberculosis was definitely known to be three years. That the process in the hypophysis could have been of equal duration is possible but improbable. Its duration, however, was certainly over eight months, since the first hypophyseal symptom noted, cessation of the menses, occurred eight months before death. That the hypophyseal lesion could have given rise to the ocular tuberculosis by way of the optic nerve is hardly conceivable. The chiasm was only slightly involved at death and there were no foci in the optic nerve or in the chorioid, so that for the eyes to have been infected in this way it would have been necessary for retrograde metastases to have traveled along the subvaginal

4. Hueter, C.: Hypophysistuberkulose bei einer Zwergin, Virchows Arch. f. path. Anat., 1905, clxxxii, 219.
5. Heidkamp, Hans: Beitrag zur Tuberkulose der Hypophyse, Virchows Arch. f. path. Anat., 1912, ccx, 445.
6. Sommer, H.: Zur Tuberkulose der Hypophyse, Ztschr. f. Laryngol., 1910, ii, 355.
7. Lancereaux, E.: Traité d'anatomie pathologique, 1883; Cited by Heidkamp, Note 5.
8. Lucien, M., and Parisot, J.: Tuberkulose de l'hypophyse et diabète sucré, Rev. neurol., 1909, No. 16, p. 970.
9. Beck: Tuberkulose Entartung des Hirnanhanges als Ursache der Diplopie und des Strabismus, Ztschr. f. d. Ophth., 1835, iv, 401.
10. Wagner, E.: Tuberkel der Glandula pituitaria, Arch. d. Heilk., 1862, iii, 381.
11. Haushalter, P., and Lucien, M.: Polyurie simple et tubercle de l'hypophyse, Rev. neurol., 1908, p. 1.
12. Cushing, Harvey: Concerning Diabetes Insipidus and the Polyurias of Hypophyseal Origin, Bull. Mass. Med. Soc., 1913, xxiv, 25.

space and thence along the subchorioidal space into the anterior chamber without producing any lesions in their transit. On the other hand, for similar reasons, it is almost equally improbable that in the reverse way the ocular lesions could have infected the hypophysis. In all probability, therefore, the ocular and hypophyseal lesions were independent of each other, a conclusion that is strengthened by the fact that chronic ocular tuberculosis is relatively common while tuberculosis of the hypophysis is extremely rare.

There can be little doubt that the tuberculous focus which gave rise to the ocular and hypophyseal lesions was the small conglomerate tubercle at the base of the right lung. The latter may have represented the recurrence of an old lesion, perhaps originally associated with the old pleurisy in this situation, for a fresh infection would have been expected to produce a more active type of tuberculosis. The persistent low temperature and the absence of a well-marked tuberculin reaction are likewise against a recent infection, as is also the fact that tubercle bacilli could not be found in sections of any of the lesions. A low order of virulence of the infecting organisms was indicated by the negative result of animal inoculation, although it is possible that the amount of material used for this purpose was insufficient.

As is well known, patients having chronic ocular tuberculosis seldom if ever die from pulmonary or generalized tuberculosis. The present case is not a real exception to this rule, since it is evident that death would not have ensued had it not been for the chance involvement of such an important structure as the hypophysis. Occurring elsewhere, a lesion of such small size in a case of this type would undoubtedly have healed. This case, in fact, affords the first demonstration based on anatomic findings of how insignificant the systemic tuberculosis may be in cases of chronic ocular tuberculosis.

Each eye in this case showed the typical clinical picture of recurrent tuberculous sclerokeratitis. While the case was under my observation there was active keratitis, but the only clinical evidence of scleritis was the presence of the corneal scars extending out from the limbus. Nevertheless, on microscopic examination the anterior part of the sclera in each eye showed numerous active tuberculous foci, a fact that suggests that scleritis may often exist without characteristic clinical manifestations, especially when in association with tuberculous keratitis.

The lesions of the cornea, iris, filtration angle, and surface of the ciliary body were similar to those previously described by me. The tuberculous synechiae at the pupillary margins were especially well marked. The chorioid and retina were free from tubercles. None of the ocular lesions showed caseation, but simply epithelioid and giant cells and more or less fibrosis. The right eye, in addition, showed two features not hitherto described, namely, the unusual type of tubercle on the posterior surface of the cornea, and the tubercles of the vitreous.

Elsewhere I have brought forward evidence, which I believe to be sufficiently conclusive, that in chronic ocular tuberculosis the infection of the ocular tissues takes place from the aqueous humor. The bacilli reach the latter from the blood through the ciliary processes, and are then carried to the filtration angle, whence they may pass into the cornea or sclera. They may also be deposited on the ciliary body or carried into the iris, producing focal lesions here, or into the subchorioidal space, where they may give rise to chorioidal foci. In experimental ocular tuberculosis produced by injecting dead tubercle bacilli into the vitreous or aqueous humors, all these lesions were produced, and in addition sometimes tubercles of the retina and vitreous. It is evident that the ocular lesions in the present case had a similar origin. The vitreous tubercles of the right eye were identical in appearance with those produced experimentally. The foci involving the surfaces of the ciliary body in each eye were clearly due to infection from the aqueous humor, since all stages in their formation could be observed, beginning with a minute nodule of endothelial cells on the surface of the intact epithelium. A few tubercles, however, were found entirely beneath the epithelium; and these might have been regarded as direct blood metastases, were it not for the fact that the experiments referred to demonstrated that minute tubercles can pass through the pars ciliaris retinae into the underlying stroma without leaving permanent defects in the epithelium.

It will be noted that this theory necessitates the assumption, as yet unproved, that tubercle bacilli may pass from the vessels of the ciliary body into the aqueous humor. The evidence for the theory, however, is otherwise so strong, it seems to me, that it may be regarded as sufficient to establish this assumption as a fact. It is known that bacteria may be excreted by the kidneys, so that *a priori* there is no reason why they cannot be excreted by the ciliary processes. If this is so, it may be asked why tubercle bacilli are not similarly excreted in cases of active tuberculosis. This is probably due to the fact that here the conditions of immunity are different from those existing in chronic ocular tuberculosis, so that when bacilli get into the blood they are either quickly destroyed or immediately produce lesions wherever they happen to lodge, which in case of the eye is most often within the choroid. It may also be asked why other organisms are not sometimes excreted into the aqueous humor. The answer to this is that there is no evidence that under certain conditions of immunity this may not happen, or, in fact, that other forms of iritis and uveitis may not be produced in this way.

A survey of the features of chronic ocular tuberculosis in general, including those of the present case, makes it plain that there is something special about this type of tuberculosis in addition to the mode of origin of the eye lesions. This is indicated among other facts by the following:

1. Chronic ocular tuberculosis almost never occurs in cases in which there are well-marked clinical signs of systemic tuberculosis and in which, therefore, metastases would presumably be most apt to occur. On the contrary, it occurs chiefly in cases in which it is difficult or even impossible to find any other indications of tuberculosis. The present case is in this connection a striking example.

2. Although chronic ocular tuberculosis is rare compared to the incidence of tuberculosis in general, yet when it occurs it is almost always sooner or later bilateral, thus showing plainly that it does not represent chance metastases.

3. It occurs almost exclusively in adults, and sometimes even in patients of advanced age.

4. It occurs far more frequently in females than in males.

5. The temperature is almost never elevated and is often subnormal.

6. A large dose of tuberculin is usually required to produce a constitutional reaction, and rarely a tuberculin reaction cannot be obtained at all.

7. Acid-fast tubercle bacilli seldom if ever can be demonstrated in the lesions.[13]

8. Animal inoculations of the lesions usually if not always give negative results.

To account for the foregoing facts, I venture to advance the following hypothesis. It is, briefly, that a condition is established in which the tissues of the host and the infecting organisms have become relatively tolerant with respect to each other. This condition is due to the fact that the tissues and organisms have existed so long under the same environment that they have developed similar immunities. The mutual tolerance is, however, not absolute, so that lesions of slight intensity but of long duration are produced, and the growth of the organisms is to a greater or less degree inhibited.[14]

According to this hypothesis the history of a typical case of chronic ocular tuberculosis may be reconstructed thus: In early life, most often in childhood, the patient becomes infected with tubercle bacilli, perhaps, usually of the bovine type. A sufficient degree of immunity is quickly developed and the lesions heal without having become extensive. Many of the bacilli, however, remain alive in the lesions. In the course of years, the bacilli become more or less active from time to time, owing to varying resistance of the patient, and as a result the tissues and bacilli become more and more tolerant of each other. The bacilli become not only relatively but also absolutely less virulent, and lose their acid-fast property.[15] At some time under these conditions the resistance of the patient becomes depressed to an unusual degree, and the original lesions take on renewed activity. Bacilli are now at times given off into the blood, but owing to their small numbers, lack of virulence and the resistance of the patient, metastatic lesions are directly produced only exceptionally.[16] From time to time, however, bacilli pass from the capillaries of the ciliary body into the aqueous humor, where, owing to the lack of immune substances encountered, they proliferate and then sometimes give rise to the various lesions of chronic ocular tuberculosis, as already described, of which those of scleritis and keratitis are the most frequent. Many times, no doubt, the bacilli pass into the canal of Schlemm and are carried from the eye without producing any lesions. On account of the relative inactivity of the bacilli and diminished sensitiveness of the tissues to tuberculo-toxins, the ocular lesions do not reach large size and are often associated with little or no leukocytic infiltration. The resistance of the patient now becomes reestablished and the lesions heal. After a shorter or longer interval, the resistance again becomes lowered and the preceding process is repeated, with the addition that some of the older ocular lesions again become active.

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13. I have found that altered pigment granules may occasionally stain by the carbolfuchsin method and appear not unlike tubercle bacilli. This no doubt has given rise to error.

14. This theory, it seems to me, also explains well the parasyphilitic affections. Thus it explains why they are not amenable to mercurial treatment, since the spirochetes and body cells have become to such an extent alike in their vital processes that drugs no longer act differentially on the organisms. Possibly it explains also why hereditary interstitial keratitis is likewise resistant to treatment.

15. I have shown experimentally that dead tubercle bacilli may lose their acid-fast property when injected into the eyes of immunized animals, and yet remain capable of producing tubercles.

16. The thought naturally suggests itself here that it is to such relatively benign metastatic lesions that certain forms of tuberculous choroiditis, retinitis, etc., are due.

ABSTRACT OF DISCUSSION

DR. ERVIN TÖRÖK, New York: The way in which tuberculosis of the eye develops is still an open question, but I think there is no doubt that it must be a secondary lesion in most cases. Except for tuberculosis of the conjunctiva, cornea, sclera and lacrimal organs, when we may assume that a break in the epithelium occurred through which infection entered, no other explanation can be given. The bacilli are carried to the eye by the blood and I have read with great interest Dr. Verhoeff's theory by which he explains how the bacilli get into the interior of the eyeball through the ciliary processes, and the ocular tissues are then infected through the agency of the aqueous humor. The theory is very interesting and is true in some cases, as Verhoeff's animal experiments have undoubtedly shown. I do not think, however, that this is the rule, or that it is necessary to assume that the bacilli pass into the aqueous through the ciliary body without infecting it, and again from the aqueous back into the ciliary body, then infecting it. I rather think that the most common way of infection is the direct way: the bacilli are carried in the blood and are deposited in the eye in one of its tissues, if, for any reason, its resisting power is lowered. Those tissues of the eye are most frequently affected that are most abundantly supplied with blood-vessels, that is, the tissues of the uveal tract, and I doubt whether a tuberculous scleritis or sclerokeratitis, as a primary disease of the eye, exists. I think that in all of these cases the primary focus of the eye is in the ciliary body and the nodules on the sclera develop later, and consequently in reality are symptoms of a tuberculous cyclitis.

The cause of this lowered resisting power is of course hard to determine. In a great many cases, if we inquire carefully into the previous history, we shall find that the patient has had some trouble with the infected eye previous to his tuberculous trouble. This would also explain why we find that in a great many cases only one eye is affected.

From a practical point of view, the most important test to perfect the diagnosis is the tuberculin test. The subcutaneous test is the one we usually employ, giving the patient 1, 3 and 5 mg. at three-day intervals. Attention must be paid to the reaction at the site of the injection, to the local reaction of the eye, and to the general reaction.

I fully agree with Dr. Verhoeff that large doses of tuberculin are necessary to produce the general reaction, and even then it is sometimes negative. Here again the temperature and the patient's subjective symptoms are important.

DR. M. SCHOENBERG, New York: I object to Dr. Verhoeff's theory as to the manner in which the chronic tuberculosis originates and spreads. His argument, published some time ago in the *Archives of Ophthalmology*, includes, to my mind, a fundamental error. His experiments have been made with dead tubercle bacilli, which, it seems to me, do not conform themselves to nature. There is no such thing as a condition in the eye produced by tuberculin injection in itself. If Dr. Verhoeff had performed the experiments by using living tubercle bacilli it would be much more conclusive. He says he could not use the living bacilli because they produced such an acute reaction that the study of the processes was impaired by the suddenness and acuteness of the processes. I take issue with this statement, as I have been engaged in a series of experiments on ocular tuberculosis in rabbits for the last few months in the laboratory of the Eye and Ear Infirmary in New York, and I have succeeded in producing a chronic, slow, progressive type of iritis by the injection of a new strain of human tubercle bacilli. I have also produced another type, a very acute, progressive general uveitis by injecting into the anterior chamber human tubercle bacilli which had been sensitized for about twenty-four or forty-eight hours. I would like to hear Dr. Verhoeff's views in the light of his own experience, of the reason why tubercle bacilli from a broken-down gland or some other tissue attacked, in his remarkable case, only the hypophysis and the ocular tissue. Why should they not attack other tissues? In the light of the work done by Rosenow and some other Chicago men it could be explained on the assumption that there are numerous strains of tubercle bacilli, and, as with other organisms, each strain has an

affinity for particular tissues, just as drugs have affinity for certain tissues in the body.

Dr. E. V. L. Brown, Chicago: In corroboration of Dr. Schoenberg's statement that there are undoubted cases of tuberculosis of the eye that do not react to tuberculins, I wish to recall the article by my associates Drs. Dodd and Lane of Chicago, read before this Section two years ago, in which miliary tuberculosis with the organism was identified in the ciliary body and iris. Successive doses up to 10 mg. had been used with no reaction on the part of the patient.

Dr. R. L. Randolph, Baltimore: How did Dr. Schoenberg inject living organisms into the eye, in what medium were they suspended and how much was injected? The organisms I have dealt with, no matter how slightly pathogenic they may have been, have always been followed by more or less reaction when injected into the eye. I was very much surprised to hear Dr. Schoenberg's interesting observations on this point.

Dr. F. H. Verhoeff, Boston: I cannot agree with Dr. Schoenberg that my experiments on rabbits were vitiated by the fact that dead instead of living tubercle bacilli were injected into the vitreous or aqueous humors. The purpose of the experiments was simply to show where the bacilli finally lodged in the eye, that is, to show the location of the lesions to be expected relatively avirulent if tubercle bacilli should be secreted by the ciliary body into the aqueous humor. In this respect the experiments were eminently successful. I agree with Dr. Schoenberg that the involvement of the human eye in chronic ocular tuberculosis is due, at least in part, to some peculiarity in the character of the bacilli, and in my paper I attempt to give the reason for this peculiarity.

TUMORS OF THE OPTIC NERVE*

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This paper is intended as a contribution to the surgery of those primary tumors which occur in the optic nerve. As long ago as 1901, from the laboratories of the Royal Victoria Hospital, I issued a monograph, with which possibly some of you may be acquainted, dealing more especially with the pathologic aspect of the subject. I now propose to lay before this Section of the American Medical Association the experience which I have acquired since that time in the clinical aspects of these cases and in the operative procedures for their removal. As preliminary to that, however, I shall be obliged to define more clearly the conclusions at which I have arrived on the pathology of these growths.

Simultaneously with the arrival of the invitation that I should address this meeting, I encountered a clinical experience which encouraged me to undertake the task, for tumors of the optic nerve are of such rare occurrence that most men, even in a life's experience, do not encounter them; and a surgeon seeing the condition for the first time must almost of necessity turn to the literature for guidance.

Let me, then, direct your attention to a few facts concerning the pathology of these growths. In the investigations spoken of, I came to the conclusion, with very material assistance from Professor Adami, in whose laboratory at the Royal Victoria Hospital, Montreal, my studies were conducted, that tumors of the optic nerve, growing within its dural sheath, could be rather sharply divided into two main groups. In the first place one had to do with growths the basis of which was essentially an overgrowth of the fibrous connective-tissue elements of the nerve, but very protean in character, inasmuch as one found every phase of development from the embryonic myxomatous type to firm fibrous bands. The appearances were unquestionably influenced by conditions of stasis in the lymph and venous channels which resulted solely from the local anatomic arrangement of the parts; and altogether the changes suggested those characteristically present in cases of elephantiasis. These findings were in agreement with those of practically every student of the subject as a whole, and can still perhaps be best described by the term "fibromatosis," which I used in the title of my first contribution to the subject.

In the second group of neoplasms the changes, varying somewhat in character, were attributable to a proliferation of the local endothelial cells, and the growths were classified as endotheliomas.

It seemed, too, from our studies, that these two groups were histogenetically closely related, that even, at times, it was possible for the indeterminate fibrous tumors to take on the more striking arrangement of the endotheliomas. As regards frequency I found from an analysis of the entire literature on the subject that the fibrous growths outnumbered the endotheliomas in the proportion of about thirty-five of the former to one of the latter.

Unfortunately, we know so little about the final outcome of these cases that it is impossible to make very positive statements in regard to their clinical behavior. We know that they are characteristically slow in their development; and the reports seem to show that recurrences, always of a purely local character, are rare, secondary growths being perhaps commoner after the endotheliomas than after the fibrous tissue-group. In this connection let me say again, however, what I previously laid great stress on in speaking of the prognosis in these cases, that in many, if not in the majority, of these cases, the tumor of the optic nerve is but part of a neoplasm with a more or less wide intracranial distribution which in its eventual development will bring about the death of the patient. Whether or not it is possible and permissible to do anything further in those cases in which it is perfectly clear after the removal of the orbital growth that an intracranial portion remains, is still an open question.

In considering this subject it is of equal importance to make note of the primary extradural tumors of the optic nerve, that is, growths which take their origin in, or from the outer surface of, the dural coat of the nerve. While by no means so common as the intradural growths, occurring probably in the ratio of about 1 to 5 or 6, they are more frequently encountered than the intradural endotheliomas whose histologic structure they almost invariably possess. Parsons' careful analysis of the published cases led him to believe that almost certainly at least three-fourths of these growths were of this nature, the remaining tumors being of a frankly sarcomatous type. Without entering into a consideration of the possible relationship of these tumors to the intradural variety, or attempting any conjecture as to their origin, one can say that, while these growths are, too, like the intradural variety, characteristically "slow and even" in their development, they are yet more rapid in their growth than the intradural type, as one would expect from the absence of the retaining dural sheath; that their removal is more often followed by recurrences,

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and that they may even, if Lawson's case be admitted (though it is questioned by Parsons) be followed by metastases. In a word, the extradural tumors are distinctly of a more menacing type than those within the dural sheath.

The fact that most if not all of the intradural connective-tissue tumors are of a non-malignant character, and that these greatly outnumber the endotheliomas, might incline one to adopt an "expectant" attitude, especially in those cases in which, as often happens, the neoplasm over long periods seems to be making little or no progress. This is especially true when other conditions are present that favor a policy of waiting, that is, pregnancy, the need of nursing a child, or profound nervous or other systemic disturbance; and always there are to be considered the dangers inherent in the operation and in the anesthetic, and the question of mutilation, especially in women.

A careful consideration of this attitude leads one, however, inevitably to the conclusion that it is incorrect from every point of view. In the first place, because it is impossible to differentiate clinically the three types of growths whose pathologic features have just been described. All these tumors have exophthalmos, in or near the line of the orbital axis, and profound or complete loss of sight as their characteristic symptoms; but, while it can be said that the possibility of an intradural tumor diminishes and that of an extradural neoplasm rises in proportion as the degree of sight increases, this statement can be taken only very generally; for there are marked exceptions on both sides. The ophthalmoscopic changes and the other signs as described are, too, of no value in making a differential diagnosis; and even the age factor coincides. A surgeon can never be certain, then, that he has to do with a growth of the "fibromatosis" type; he has always to keep in mind the possibility of an intradural endothelioma or more especially of an extradural neoplasm of this nature. An attitude of expectancy here can only give rise to conditions which at best will necessitate a more radical operation, and at worst will jeopardize the patient's chances of recovery.

In the second place, a waiting policy is unjustifiable in tumors of the optic nerve because one cannot ever be sure of the size, situation, or rate of development in any given growth, at any given moment. It is notorious that in these cases the exophthalmos, the principal index, is often pronounced out of all proportion to the size of the neoplasm, and that it frequently undergoes variations that bear no relationship whatever to the dimensions of the swelling. The explanation of these features is to be found in conditions of stasis and edema in the lymph-spaces in and about the optic nerve and eyeball; and perhaps at times in the buckling of a piece of uninvolved nerve. There are so many exceptions that it can be said only in a very general way that early pain, conspicuously absent in these cases, would rather suggest a development in the apex of the orbit, and an early neuritis or atrophy involvement of the anterior portion of the nerve. Increasing hypermetropia, valuable when present, too often fails us to be relied on; and palpation is seldom of any assistance, and may even be misleading.

Finally, considering the matter from the point of view of the operator who wishes while removing the growth to retain the eyeball *in situ* (and the desirability of this effort is now so well established that I shall not take up your time in defending the position), there is every reason in favor of early and immediate interference. It can be affirmed with emphasis that no matter what procedure is adopted, the larger the growth the greater the manipulation that is necessary, with its consequent dangers to the cornea and to the blood-supply of the globe, and the fewer the chances of achieving the end desired. In illustration of the points which I have tried to adduce let me cite the two following cases:

CASE 1.—Miss B., a nurse, aged 44, consulted me on Jan. 25, 1910, for blurring of the right eye noticed during the preceding few weeks. The ophthalmoscope showed no changes in either eye, but, while the vision of the right side equaled 6/5—, that of the left was only fingers at 1 foot. The diagnosis, uncertain at first, became, five months later, clearly one of tumor of the optic nerve, when slight proptosis appeared along with beginning pallor of the optic disk.

The patient had a most deeply rooted objection to an operation and dreaded the disfigurement. Influenced by her and by an imperfect apprehension of the factors which I have already set forth at length, I decided to follow the case in an expectant way.

The proptosis developed very gradually during the next three years without any change in the refraction of the eyeball and with only slight involvement of the musculature; but during the summer of 1913, the rate of progress was much more rapid, the exophthalmos becoming noticeably greater, the excursions of the globe much more restricted, and severe neuralgic pains a pronounced feature. The patient's general condition was somewhat impaired, apparently, however, from pain and loss of sleep rather than from the direct influence of the tumor on her constitution.

On the patient's admission to the hospital, Oct. 15, 1913, the eyeball showed a proptosis, directly in the line of the axis of the orbit, of about 2 cm.; total restriction of movement, except downward and inward, where the excursion was about half the normal; complete atrophy of the optic disk; and nothing on palpation. No changes were made out in any other part of the body; and the other eye was quite normal in every respect. The growth was removed October 16, in the manner described later on, and recovery was quite uneventful. At present there is no sign of recurrence, and the patient's general condition is excellent.

The macroscopic examination of the orbital contents showed a large tumor-mass surrounding the posterior surface of the globe and extending into the orbital tissues beyond the muscular cone; but the dural sheath was so disintegrated and invaded by the growth that it was impossible to say whether the neoplasm had originated within or without this structure. Microscopic examination also failed to clear up this point. The growth was pronounced to be "fundamentally endotheliomatous" by my colleagues, Drs. Gruner and McMillan, who sent me the following minute description: "The tumor consists of lobulated masses of triangular shape, separated by broad connective-tissue septa. The lobules are partly solid and partly take the form of acinous tissue, with numerous polygonal spaces of fairly uniform size, filled with material which stains blue with hematoxylin and pink with carbolthionin. The adjoining spaces are separated by two layers of cells, the lining of each space, respectively. There appears to be no fibrous tissue between the acini at all, and, speaking broadly, many fields can be found which closely resemble normal thyroid tissue. The angles between the spaces are filled up with cells similar to those lining them, and thus solidity is imparted to the mass. The cells lining the spaces are small, cubical or slightly flattened, and have a relatively large, intensely staining nucleus of oval shape; but definite cell-borders cannot be distinguished. The cytoplasm is rather acidophil; occasionally, a few cells are found mixed up with the mucoid matter of the space. Some of the cells show a tendency to vacuolization in the vicinity of the nucleus; but the cytoplasm does not develop a foamy structure, how-

ever abundant the mucoid material may be. The shape of the lobule is not always the same; a number of them are elongated while others differ in having no definite outline and being made up of ramifying, linear groups of cells devoid of any lumen formation. Transition forms between this type and the first described are to be found. These are areas in which the material separating the ramifying column is undergoing mucinous change, staining purple instead of pink or blue, but otherwise showing the same appearance as is seen in the gland spaces already referred to. Another type of lobule is that composed of densely packed, darkly staining, small rounded cells without any lumen formation of any kind. The stroma of the tissue is composed of very coarse fibrous tissue in which there are few cells. It is variable in thickness, the smallest lobules being enclosed by the largest amount. In many cases the septa become converted into hyaline lines staining brightly with eosin. The muscular bundles are pushed aside by those nodules of growth which are present in that situation."

The history of my second case is a curious story of functional disturbance and of simulation based apparently on numerous organic troubles. What relationship all these bear to the changes in the optic nerve it is of course impossible to say.

Case 2.—The patient first came under observation at the Royal Victoria Hospital for profound chlorosis and gastric ulcer. Three years later she was operated on at the same institution for appendicitis; and shortly after this, Oct. 5, 1900, I saw her in the eye clinic for headaches which were worse after reading and sewing and had been especially bad since her abdominal operation. On the occasion of her first visit her sight was 6/6 on both sides, with a manifest hypermetropia of half a diopter; and the fundi were unquestionably normal. Following the instillation of a mydriatic, she developed within the next few days the most typical example of functional amblyopia I have ever seen, great reduction of the central vision with contraction and inversion of the visual fields. She had typhoid fever in December, 1906, with a miscarriage during the course of the attack, and, following this, functional hemianesthesia. A year later, Feb. 15, 1907, she again came under my observation in the eye clinic, and I was surprised to find unmistakable signs of a tumor of the right optic nerve, and slight proptosis, with complete atrophy of the optic disk, the other eye being normal.

During the following years the patient had repeated miscarriages attributable to uncontrollable vomiting that her pregnant state engendered, and several gynecologic operations for the relief of uterine disturbances. I saw her a few times during this period, but her wretched state of health, coupled with the fact that the tumor showed little or no apparent progress, seemed to justify a waiting policy. Following a severe operation on one of her kidneys in the spring of 1913, the condition became, however, rapidly worse; and when I saw her in the autumn of the same year and advised removal of the tumor she consented to have it done.

At the time of admission to the Royal Victoria Hospital, Jan. 19, 1914, little or no restriction of the ocular excursions accompanied the moderately marked proptosis, and nothing could be made out on palpation. The ophthalmoscopic picture was that of a secondary atrophy of the optic nerve with the deposition of a good deal of fibrous tissue on the disk and along the vessels below. There was also an irregular band of atrophic retinitis running horizontally through the macular area.

The following day the tumor was removed in the manner which I shall presently describe, the eyeball being left in position. For several days following the operation there was a marked milkiness of the cornea suggesting the appearance which one sees following a lime burn of this structure; and there was marked pericorneal congestion. There remains now an apparently permanent opacity of the lower half of the cornea with superficial vascularization as in pannus, and this, together with a marked layer of exudation in the pupillary area, prevents one from obtaining anything but a dim red reflex from the fundus. The iris still remains somewhat discolored, the globe is slightly shrunken and squared, and the tension is quite soft; but the movements of the eyeball are practically full, and, though the lids are somewhat retracted, the general appearance is good.

The excised tumor measured 3 cm. in length by 1.75 cm. at its point of greatest breadth. It strongly suggested a phimotic penis in appearance, owing to the fact that it tapered markedly toward its posterior end and was constricted about its middle by a band of fibrous tissue. A macroscopic examination showed that the removal of the tumor at the posterior pole of the globe was incomplete, as was also the eradication behind. Microscopically the growth belonged unquestionably to the group of connective-tissue overgrowths which I have described at the commencement of this paper and very fully dealt with in my previous monograph.

The operations performed in these two cases, in both of which the principle of saving the eyeball while removing the growth was followed, can be described briefly.

In my first patient I employed Kroenlein's procedure, which consists I may say briefly for those not familiar with its details, in removing the tumor through an opening made in the external wall of the orbit. The only variation from the operation as originally described was that I used a strong septal saw to make the bony incisions instead of the chisel and mallet as recommended by Kroenlein. On entering the orbit I encountered a soft, almost gelatinous tumor, much larger than I anticipated; and it soon became apparent that it had grown to such a size and had infiltrated the tissues to such an extent that it was impossible to remove it through the lateral aperture. Accordingly a complete evisceration of the orbit was carried out after the osseous resection was replaced and the overlying flaps closed. Recovery was quite uneventful, the removal of the orbital contents not retarding in any way the healing of the incisions made during the first operation. At present there is no sign of recurrence, and the patient's general condition is excellent.

In view of the difficulties I had had with my first patient, I decided to employ a modification of Knapp's procedure rather than the Kroenlein operation to remove the tumor in my second case, because it was apparent that in this instance, too, the neoplasm had attained a considerable size. After tenotomizing the external rectus and opening the conjunctiva and Tenon's capsule for a short distance above and below, I had no difficulty in separating the sharply defined intradural growth from the surrounding structures; and I succeeded in removing the neoplasm very completely, and with practically no hemorrhage, by means of a stout tonsil snare, which lent itself very nicely, it seemed to me, to this purpose. Following this the external rectus was reattached and the conjunctival opening closed by sutures.

Criticizing Kroenlein's operation and Knapp's procedure in the light of this recent experience, and of previous cases in which I have made use of the latter method, I would say at the outset that Kroenlein's operation is adapted to the removal only of small, or at most, medium-sized growths. At best, one feels hampered by the smallness of the lateral opening; the deeper parts of the orbit are not so readily seen as one would think, owing to the tendency of the contents of the cavity to prolapse into the wound; and it is actually impossible to deliver large growths, except piecemeal, through the biggest aperture that can be made. On the other hand, the vascular supply of the eyeball is least interfered with by this method; the cornea perhaps is not quite so exposed to injury as in Knapp's procedure, and the orbit is not opened to infection from the conjunctival sac.

The Knapp method is suitable for any sized tumor of the optic nerve, it being possible with external canthotomy for an operator to procure practically any sized aperture he wishes. The only objection that can

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be made to it is that it opens up the orbit to infection from a field which cannot be sterilized. In the absence of tear-sac trouble, and with bacteriologic control, this fear, however, can be disregarded. With the method one works easily in an anteroposterior direction; and in those cases in which the tumor is not infiltrating the orbital tissues, these structures are prevented from prolapsing into the field of operation by Tenon's capsule. Further, with this procedure, if the operator finds the growth ineradicable, he can proceed to evisceration of the orbit without loss of time, and without the injury to the adjacent parts incidental to Kroenlein's operation. Viewing the matter as a whole, I look, then, on Knapp's method as easier to perform and more suitable for these cases than Kroenlein's procedure; and I am convinced that it alone can be satisfactorily employed when the growth has attained large dimensions.

The two cases which I have cited brought with them an experience which materially altered my views in regard to the treatment of tumors of the optic nerve. My previous work had obscured the potentialities of the few reported cases of intradural endothelioma, and I had not fully grasped the more menacing characters of the extradural tumors, which had not come within the scope of my paper. There remained only the impression of the connective-tissue growths, little if at all malignant, and characteristically slow in development; and the feeling that these could be followed in an expectant way, until pain or some such indication demanded their removal, much in the same manner as one does a fibroma of the uterus. My conviction in this matter was strengthened by the emphasis laid on the benignancy of these growths by numerous other investigators whose findings were substantially in accordance with my own; but it is clear now that the contingencies which I have mentioned have not been clearly apprehended or sufficiently accentuated, because the general conceptions of tumors of the optic nerve have been based almost exclusively on studies of the intradural connective-tissue variety.

The expectant attitude adopted in my second case, largely as the result of conditions which could not be controlled, was to a certain extent justified by the finding of a tumor of the benign fibromatosis type and by the ease with which it was removed. The changes in the intracranial portions of the nerve, which the microscopic examination clearly showed, occurred in all probability concomitantly with those in the orbital division. This supposition is based on the post-mortem findings in several cases of this kind to which I have already referred; but it is just possible that one had to do here with one of the more uncommon occurrences in which the growth develops in the anterior end of the nerve, leaving for a varying length of time a piece of uninvolved nerve between the tumor and the optic foramen; and that earlier interference might have resulted in an entire eradication of the process. In my first patient, however, it is apparent that under the same clinical picture one had to do with a growth of an unquestionably more malignant nature, as shown by its histologic character and its behavior in the tissues; and though I am persuaded that the tumor involved the cerebral end of the nerve from the outset, and know that the bony walls were not invaded, there is no question now in my mind that the right thing to have done in this instance was to remove the growth as soon as the nature of the condition became clear. Further, in view of the occurrence of neoplasms of this sort, I feel that the only safe practice to adopt in tumors of the optic nerve is to extirpate them as soon as possible after the diagnosis has been made.

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ABSTRACT OF DISCUSSION

DR. MARCUS FEINGOLD, New Orleans: Primary tumor of the optic nerve is a rare disease so that few of us are so fortunate as to see even one, much less three cases. Von Graefe's classical description of the clinical features made the diagnosis quite easy—the early blindness in contrast with the comparatively late appearing exophthalmos; the free mobility; the exophthalmos mostly directed forward; the youth of the patient, and the comparatively low malignancy, etc. But the pathologic side of the picture could not be settled early for several reasons.

In 1902 Dr. Byers tabulated all cases of intradural tumors published up to that time. In this tabulation tumors of differing nature are placed, from which Dr. Byers succeeded in isolating a group of tumors which are characterized by excessive connective-tissue formation, for which group he coined the name of fibromatosis.

Apparently a step nearer to the ultimate understanding of these tumors has been made by A. C. Hudson in a monograph on "Tumors of the Optic Nerve" (*Ophthalmic Hospital Reports*, xviii, 317). In it he states as the purpose of his paper "a supervision of the whole of the available cases based on a critical examination of their records and more especially their histological features." He divides the cases into three groups: Group A, containing 118 cases, the group of gliomatosis; Group B, 6 cases, fibromatosis of the nerve-sheath; Group C, 28 cases, endothelial tumors of the nerve-sheath. In Group A, the tumor tissue is characterized by cells of various appearance. Between the cells is found a product of degeneration of the cell processes, often determining the appearance of the tumor. Some of the tumors being harder and bearing the character of fibromatosis; others are more myxomatous in appearance and others have a more cystic character. Above all, however, "the overgrowth of glia tissue," the main characteristic of these tumors, is caused by the previous death of nerve-tissue from accident, traumatism, dyscrasia and vascular changes, etc. Group B is characterized by the enormous development of fibrous tissue in the nerve-sheath, the nerve suffering only secondarily by compression. Again, the fibromatosis of the dural sheath is only made possible by lesions of the nerve-tissue similar to those in Group A. This group is characterized by the absolute "innocent" character of the tumor. Group C is characterized by the endothelial nature of the cells and the whorl-like appearance they give to the tumor. They are analogous to the endothelial tumor of the brain membranes. Tumors of this group appear, on the average, later in life and have a tendency to invade the neighboring tissues and the exophthalmos precedes blindness in a large percentage of cases. In these cases, also intra-ocular extension of the growth has been found.

Mention, I believe, should be made of the suggestion of Greeff, based on a paper by Braunschweig, that a great many of the features of these tumors of the optic nerve point to and could be explained by an embryologic origin.

As to the treatment, one can only agree with Dr. Byers that very early operation is indicated before invasion of the cranial cavity has taken place. Of course, as much as possible, the operation should aim to retain the eye, and there is little to be added as to the kind of operation, except to mention the Legrange operation and the method as practiced by de Schweinitz (*American Ophthalmic Society Rep.*, 1911).

DR. G. E. DE SCHWEINITZ, Philadelphia: As Dr. Byers has pointed out in his admirable paper, intradural tumors of the optic nerve are of comparatively rare occurrence.

The growth in the second case was a psammomatous endothelioma. The bulk of the mass is made up of a

coarsely and irregularly interwoven network of fibrous tissue in the midst of which are found numerous concentrically laminated psammoma bodies. In parts of the growth are groups of comparatively large embryonic connective-tissue cells of variable shape, provided with large round oval nuclei of the vesicular aype. They are apparently of endothelial origin, and in picked fields their relation with small blood-vessels is clear, such vessels being seen in longitudinal section, often with branches, showing their walls formed of multiple layers of these elements, or they are seen in transverse section as whorls of endothelial cells, sometimes with the diminished lumen still appreciable, sometimes solidly closed. In these, more or less fusion of the cells may be made out, apparently with hyaloid change, and in a few places the development of the psammoma bodies in these masses of endothelial proliferation is evident. Their origin thus is clearly from vascular endothelium. A similar origin of psammoma bodies in the case of tumor of the orbit which I recently reported before the American Ophthalmological Society was imperfectly evident. It will be remembered that this origin of psammoma bodies is well discussed by Adami. Sand bodies in tumors of the optic nerve have been reported, if I am not mistaken, on several occasions, for example, by Ribbert, and in a psammosarcoma which existed as a primary extradural tumor of the optic nerve, and which was described by Bilroth many years ago.

I have been particularly interested in Dr. Byers' reference to Krönlein's operation, and would agree with him that it has a comparatively limited application, and that in many instances of orbital growth, not necessarily either an extradural or intradural optic-nerve tumor, most satisfactory operative results can be secured without resection of the wall of the orbit. In a discussion of this subject, in a paper which I presented before the American Ophthalmological Society a few years ago, I reported some cases of orbital tumor in which, without the slightest difficulty, rather large growths were removed, in these instances by an incision beneath the orbital arch.

DR. EDWARD JACKSON, Denver: I was interested in Dr. Byers' final conclusion with regard to the method of removing tumors of the optic nerve or small growths in the orbit. At the time Krönlein's operation began to attract attention, from my work on the cadaver I concluded that it must have a very limited applicability in ophthalmology. When we attempt to go in through the temple we have to go through an absolutely rigid canal, not distensible, not movable in any direction; so that its practical size is very much smaller than that of an opening through the soft parts that can be pushed freely to either side. I have for some years been measuring the prominence of the eyeball. The average of the corneal apex in from the outer angle of the orbit is between 16 and 17 mm. That means, on the average, that the back of the eyeball is not more than 7 or 8 mm. behind the angle of the orbit. In some normal eyes the posterior pole of the eyeball is on a level with the outer edge of the orbit, and in any case in which exophthalmos has become pronounced the eyeball has reached pretty nearly the situation that the posterior pole of the eye is only a millimeter or two behind the outer edge of the orbit. In such cases very little is to be gained by going back through the bony wall of the orbit. I think the operation can be justified in only a few orbits that have a thick orbital margin, a small orbital opening, with rather deep-set eyeball. In such orbits we would gain decidedly by going in according to Krönlein's operation.

DR. W. C. POSEY, Philadelphia: I have seen but one tumor of the optic nerve, a sarcoma of the sheath. That I removed by the Krönlein method. I have used this operation in four or five other cases and have found it a very valuable means of gaining access to tumors within the orbit. The difficulty in the operation has been the displacement of the triangular fragment of bone forming the outer wall of the orbit. If one tries to do this by means of the chisel, as recommended by Krönlein, one has great difficulty. I note that Dr. Byers recommends resection by means of a saw. About a year ago two French authors, Magitot and Landrieaux, recommended the removal of the fragment of bone by means of a flexible saw—the Gigli saw—getting the saw back of the malar bone and cutting forward. I have been very anxious to try this method on the living body, but no case has come under my care during the past winter. The Krönlein operation leaves practically no scarring. In the five or six cases in which I have employed the procedure I have had scarring in but one, and that occurred in a child 3 or 4 years old, who was suffering from a dermoid cyst which I first tried to remove by the ordinary incision into the orbit. The healing is so prompt following the Krönlein procedure, the scarring is so slight and the aid given to the operator so great that I do not hesitate to recommend it as a very efficient measure in nearly all cases of growths lying in the posterior part of the orbit.

DR. JOHN E. WEEKS, New York: I want to bear testimony to the value of the Krönlein operation under certain conditions. I am afraid the impression gained from this discussion will be adverse to using it in many cases in which it would certainly give great aid. I have operated by the Krönlein method only four times, but in all the cases the aid afforded was certainly very great. One case was a large tumor occupying almost the entire portion of the orbit back of the globe. The lateral exposure of the orbital content was such as to enable me to outline the extent of the growth and to remove it satisfactorily. Another operation was in a case in which there was a small endothelioma occupying the apex of the orbit, which was removed. The exposure of the tissues at the apex of the orbit is much more easy and sataisfactory by a lateral opening than can be obtained through the natural opening in the orbit. In this case the tissues back of the globe could be thoroughly examined; but the growth at the apex of the orbit, which was only discovered after much search, in which Dr. Reese afforded me great aid, certainly would not have been disclosed if we had not made a lateral opening by the Krönlein method. I have resorted to the saw in almost all cases. I have, however, not used the flexible saw. I have attempted to use it but have not succeeded in passing it back of the bony structure readily, consequently I have used the ordinary stiff nasal saw with very good effect. The triangular piece of bone was readily detached and depressed and restored after the operative procedure. I think in tumors that occupy the apex of the orbit we get better exposure by removing the triangular piece of bone.

DR. W. R. PARKER, Detroit: I have performed the Krönlein operation on two occasions, once for the removal of a neurofibroma in the orbit, once for the removal of a dermoid cyst with origin at the apex of the orbit. While I believe that osteoplastic resection gave a better view of the apex of the orbit, I am forced to conclude that I could have operated in both cases without first having done an osteoplastic resection.

DR. J. O. MCREYNOLDS, Dallas, Tex.: I wish to report on the use of radium in such conditions. A case in a child 15 months old presented a typical condition of glioma of the retina. The extirpated globe showed the endothelial character of the growth, with quite a good deal of calcareous deposit. It involved the retina and the optic nerve. After extirpation of the globe there was very rapid recovery. The parents desired to have Dr. Kelly of Johns Hopkins see the child. I asked Dr. Kelly to keep me posted as to progress under the use of radium. He sent me photographs taken at intervals of six days. Altogether there were three applications. The tumor was quite large and the patient almost in a state of convulsions. Within a period of three weeks the tumor had entirely disappeared and a normal-appearing cavity corresponded to the former situation of the growth. The child was supposed to be well and returned to its home in McAlester, Okla., but died after a period of two or three weeks from some cause unknown to me. I feel that at present we know so little about the exact value of radium that it is perhaps wise to report cases so that we may later determine just what forms of tumors are

benefited by its application. It is probable that had the tumor not extended so far back into the cranial cavity when the radium was first applied the result might have been permanent.

Dr. M. FOSTER, New York: I believe that we are not justified in long delay after the diagnosis of tumor of the optic nerve, or indeed of any retrobulbar tumor has been made, before attempting to remove it and at the same time to save the eyeball. The serious question in most cases is whether the tumor is benign or malignant, for if the latter is the case the orbit should be exenterated, and any other intervention we may make will serve simply as an operative complication.

Taking the questions I suggested in order, I must say that as regards diagnosis I have found that Krönlein's operation gives free access to the outer part of the orbit, and enables me to examine the structures there with greater ease, greater exactitude, and, it has seemed to me, less traumatism to them, than I have been able to obtain through an incision in the conjunctiva. Therefore it seems superior to me as an exploratory operation. Second, by what route can a benign tumor be best removed? This varies. I would not do a Krönlein to gain access to a tumor presenting on the nasal side of the eyeball, whether or not I thought it appertained to the optic nerve; I would try to get it through an incision in the conjunctiva after temporarily dividing the internal rectus and retracting the eyeball outward. In spite of the experience I have just related I would be apt to make the same attempt to remove a small, free, accessible tumor in the outer part of the orbit, but in case I met with difficulties I would feel that I had the other operation to fall back on, and I would not make the attempt unless it seemed distinctly feasible. My point is that in the majority of cases of tumor of the optic nerve with which I have had to deal, the osteoplastic resection of the outer wall of the orbit has afforded me more direct access to them, has enabled me to diagnosticate them more accurately, and has permitted me to remove them with less injury to the other structures in the orbit, than the incision through the conjunctiva.

DR. W. GORDON M. BYERS, Montreal: The operations under discussion apply to the removal of tumors of the optic nerve. After careful consideration of the matter as a whole I should like to speak rather dogmatically in favor of Knapp's procedure for tumors of the optic nerve as being the easier and better procedure.

OCULAR MANIFESTATIONS OF THE TOXEMIA OF PREGNANCY

CLINICAL REPORT OF A CASE *

WARD A. HOLDEN, M.D.
NEW YORK

We know little about the ocular manifestations of eclampsia and their causation, and this single case is put on record because it seems to throw a little light on this obscure subject.

REPORT OF CASE

Patient.—Feb. 6, 1913, I was called to the Sloane Hospital for Women to examine the eyes of Mrs. G., housewife, aged 25. The following notes as to her condition while in the hospital are taken from the hospital records by the kind permission of Dr. E. B. Cragin and Dr. E. C. Lyons, the resident obstetrician. Feb. 3, 1913, the patient was admitted to the hospital and said that she was about seven months pregnant, for the second time; that she had vomited during the first three months of her pregnancy, and that for a month her feet had been swollen at night. Her chief complaints, however, were that for five days she had seen double, and that during this time the sight of each eye had grown rapidly worse. Her general condition seemed to be good, there was no toxic rash, the legs and feet were slightly edematous, the blood-pressure was 160 mm. and the urine (51 ounces on February 4) contained 20 per cent. albumin and many cells, and was alkaline. She was kept in bed on active eliminative treatment, and the urine increased greatly in volume and the percentage of albumin was reduced, while the reaction became acid.

Examination of the Eyes.—February 6 I found a paresis of the left external rectus and an absolute central scotoma in the field of each eye so extensive that vision was reduced to the recognition of movements of the hand, but this was possible in the entire periphery of each field. The fundi were normal in appearance except for a trace of retinal edema about the macula lutea in each eye, which was not sufficiently marked to cause obscuration of vision.

Course.—I advised the immediate induction of labor in order to save her vision, and the patient was at once delivered of an eight-months still-born child. From an obstetric point of view, she had a rapid and uncomplicated recovery, and her sight became rapidly better, while the albumin was reduced and the blood-pressure fell and she was discharged in good condition February 22.

March 3, 1913, I saw the patient again and found that her vision had returned within a few days after the operation and was $^{20}/_{30}$ in each eye with normal fields. There had been complete recovery from the paresis of the external rectus also; but she said that since leaving the hospital she had experienced much difficulty in seeing at night; and in each macular region of the retina, which had, a month before, been edematous, there was now an abnormal pigmentation. The fundi were otherwise normal.

July 22, 1913, the night blindness was said to be less pronounced, but the abnormal pigmentation was found to have spread from the macular region out to the periphery of each retina. On careful examination it was seen that the pigment of the retinal pigment epithelium had become rarefied in punctate spots and greatly increased in adjacent punctate spots. In the macular region many of the accumulations of pigment were confluent, giving this region a much darker appearance than normal when viewed with the ophthalmoscope by the indirect method. No colloid excrescences were found in the retina and the pigment seemed not to have wandered into the retina proper. The vision was $^{20}/_{20}$ in each eye. At this time there was still albumin in the urine and the patient complained of vertivo, pain in the back and transitory obscurations of vision. The Wassermann blood reaction was negative.

Oct. 9, 1913, the pigmentary changes were more pronounced.

Jan. 29, 1914, the condition was unchanged.

This curious chronic progressive disturbance in the pigment epithelium of the retina would seem to be due to the same toxic condition of the blood which, when more intense, caused paresis of one external rectus muscle and the retrobulbar affection of the optic nerves. The night blindness of scurvy, for example, must be attributed similarly to the action of the altered blood on the pigment epithelium, and this point will be mentioned later.

In the absence of an anatomic examination we can merely conjecture what was the cause of the paresis of one external rectus and of the large central scotoma in the field of each eye with normal optic disks and speedy recovery after delivery.

Weil and Wilhelm,[1] recent investigators of ocular disturbances in pregnant women, believe that the retention in the blood of certain salts causes hydropic disturbances—edemas, and eclampsia, with sudden blindness without ocular changes; while the retention

* Read before the Section on Ophthalmology at the Sixty-Fifth Annual Session of the American Medical Association, Atlantic City, N. J., June, 1914.

1. Weil and Wilhelm: Obstétrique, iv, No. 3.

of nitrogenous substances causes albuminuric retinitis and renders the prognosis grave.

The characteristic lesion in eclampsia is a more or less localized edema of the intracranial tissues, of sudden onset. Complete transitory blindness with normal fundi is a fairly frequent symptom of eclampsia. In the rare cases of incomplete recovery of vision, a concentric contraction of the fields down to 10 degrees in each meridian, with good central vision, has been found. Lagrange and Abadie each has reported such cases, and Endelmann, describing a similar case, correctly called it double homonymous hemianopsia with preservation of a small central field in each eye. A homonymous hemianopsia on one side, followed later by a homonymous hemianopsia on the other, with preservation of a small central field in each eye, has been observed repeatedly in patients with advanced arteriosclerosis, the bilateral cortical or subcortical hemorrhages or thromboses sparing some of the fibers serving central vision.

In many of the cases of blindness in eclampsia we must suppose that there is an edema affecting the calcarine cortex or the optic radiation on each side, which in some cases causes destruction of tissues and therefore produces permanent defects in the fields of vision.

The question arises whether in our case also the visual and sixth-nerve symptoms might not have been caused by a bilateral edema of some parts situated near the optic chiasm, for it is not likely that central scotomas clearing up in a few days, with disks and retinal vessels normal at the time and also months later, were due to a true inflammation of the optic nerves.

Leber,[2] nearly forty years ago, offered the suggestion, apparently overlooked by most later writers, that a retrobulbar neuritis coming on suddenly after a coryza, with slight fundus changes, might be due to a periostitis of the optic foramen—a suggestion that is fully confirmed by Onodi in the recent elaborated English edition of his "Optic Nerve and Accessory Sinuses." Onodi finds that in the cases of retrobulbar neuritis due to sinusitis, there is a direct transmission of the infection from the lining membrane of the sinus to the lining membrane of the optic foramen, either through a dehiscence in the thin bony wall or along the perforating veins. The swollen periosteum compresses the optic nerve, affecting first the delicate axial or papillomacular bundle of fibers of the optic nerve, and thus causes a central scotoma.

Foster Kennedy[3] has put on record half a dozen cases of tumor or abscess of one frontal lobe of the brain, producing a central scotoma in the field of the eye on the same side by a direct pressure on the optic nerve behind its entrance into the optic foramen. I have observed two cases of this kind. Furthermore, though some others have not had the same experience, I found that a tumor surrounding the sheaths of the optic nerve far back in the orbit caused a sharply defined atrophy of the axial bundle of fibers alone.

The conjecture, therefore, would be that an edema —possibly of the anterior lobes of the brain, but more likely of the meninges and of the periosteum of the optic foramina which is continuous with the dura mater—brought about pressure on each optic nerve near its origin and on one sixth nerve which, as it passes to the sphenoidal fissure, lies very near the optic nerve.

The night blindness in this case was preceded by edema of the retina and of the ankles in a patient with supposed retention in the blood of saline elements. In scurvy, some of the saline constituents of the blood have been found to be in excess. Hence, it may be that, apart from the sclerosis of the choroidal vessels that leads to the degeneration of the pigment epithelium and thus causes night blindness in retinitis pigmentosa and other choroidoretinal affections, an excess of certain salines in the blood may be the cause of the faulty functional activity of the pigment epithelium that produces night blindness of a transitory character.

8 East Fifty-Fourth Street.

2. Leber: In Graefe-Saemisch Handbuch der gesamten Augenheilkunde, Ed. 1, 5,2, p. 814.
3. Kennedy, Foster: Am. Jour. Med. Sc., September, 1911, p. 355.

ABSTRACT OF DISCUSSION

DR. R. L. RANDOLPH, Baltimore: Dr. Holden's case adds another to a group with which we are all somewhat familiar and as to the treatment of which we are entirely agreed. It seems to me that we see in this case an early stage of what no doubt would have developed into either a full-blown retinitis or a general edema of the retina. In Dr. Holden's case the edema seems to have been limited to the region immediately surrounding the macula, though it is no uncommon thing to meet with rather wide-spread retinal edema in these cases. Some years ago I reported (*Bull. Johns Hopkins Hosp.*, June-July, 1894) five cases of retinal involvement in pregnant women in whom the ophthalmoscopic picture consisted largely of swelling and pallor of the retina. Evidence is at hand to show that permanent impairment of sight may follow too long a delay in inducing premature labor, but I may remark here that it is astonishing what an alarming ophthalmoscopic picture may be seen in the parturient woman, yet may be followed by complete restoration of sight with the delivery of the child. In one of my cases in which at a previous pregnancy a pronounced albuminuric retinitis occurred, the woman in her desire to have a child delayed the induction of labor and suffered in consequence partial and permanent loss of sight. It is clear, however, from what I can learn that these ophthalmoscopic findings in parturient women, findings known as edema of the retina and albuminuric retinitis, are rarely followed by permanent and complete blindness, though considerable impairment of sight may be present at the time. This favorable termination is largely due, of course, to the usual attitude of the medical attendant in dealing with these cases, that is, promptly to induce labor, on account of the danger not only of the loss of sight but also of eclampsia. In all of the cases which I have seen there was albumin in the urine. The treatment is clearly indicated. The prognosis is excellent. When the condition occurs in the first six months of pregnancy and especially when associated with violent headaches, pregnancy should be terminated at once. Visual disturbances in the last seven weeks of pregnancy, when unassociated with marked ophthalmoscopic changes, should not in themselves call for the induction of premature labor and this is especially true in the last two weeks of pregnancy. The occurrence of retinitis in one pregnancy does not mean that the woman will be likewise affected in a subsequent pregnancy even though headaches be present and there be albumin in the urine, so long as the fundi are free of ophthalmoscopic changes. In the one case in which I had an opportunity of making an anatomic examination the principal changes consisted in great edema of the retina and, as a consequence, increased depth of the latter. Hyperplasia of the retina especially marked in the nerve-fiber layer was observed. The presence of hyaline masses throughout the retina and the formation of spaces was frequently noted. As a general thing the changes were more striking near the disk though visible along the retina as far forward as the ora serrata.

DR. JAMES BORDLEY, Baltimore: Dr. Holden makes the suggestion in the summary of his case that an edema of the anterior lobes of the brain, but more likely of the meninges and of the periosteum of the optic foramina which is continuous with the dura mater, brought about pressure on each optic nerve, and that these changes possibly resulted in central scotoma and paralysis of the sixth nerve. Dr. Holden points to the field-changes in frontal-lobe tumors in support of his hypothesis. In the service of Dr. Cushing such a case came to necropsy. We sent the optic nerves to Dr. Verhoeff for examination. He could find no special evidence of change in the central bundle, but did find marked peripheral changes. The central blindness in this patient was of over a month's duration. In other words, the pressure exerted on the nerve had damaged the peripheral fibers, but could hardly be held accountable for the loss of central vision.

In a case of optic-nerve atrophy following a basilar fracture necropsy revealed the optic nerve markedly compressed in the optic foramen. This case I watched. There was general loss of vision, though it never especially involved the center of sight. Nor can we overlook the tremendous pressure exerted on the nerve by the subdural fluid in high grades of choked disk; nevertheless, central scotomata are among the rarest of all visual field-changes in these cases.

Only a comparatively short time ago, in association with Dr. Follis, we opened the orbit of a patient having an acute hydrops of the optic nerve. The fluid was under great tension and the patient had never experienced loss of central vision.

One other point, suggestive but not conclusive, is that the atrophy taking place in the optic nerve of a dog from pressure of a ligature was in direct proportion to the distance from the ligature. I have seen eight of these cases of central scotomas in eclamptic women. The impairment of vision lasted from a few seconds to four days. One woman had sixteen distinct attacks in one day. Now can we conceive such a transitory edema in the tissues of the optic foramen? If we are willing to concede that eclampsia is dependent on a toxin, we shall certainly have a hard time eliminating that organ of the body which shows the most profound reaction to a long list of poisons. Dr. Holden believes the retinal pigment-changes are probably dependent on a toxin; then why absolve the same toxin from the damage to the papillomacular bundle of fibers? Dr. Holden's case impresses me as one of nephritis, probably a nephritis antedating the pregnancy, complicated by the toxin of eclampsia. In 250 cases of paralysis of the sixth nerve analyzed by Koellner, nephritis as a cause stood next to syphilis and traumatism. I have seen several such cases myself. I have, however, never seen a sixth-nerve palsy in eclampsia uncomplicated by nephritis, nor have I been able to find such a case in literature, although I may have overlooked some.

One other interesting symptom is night blindness. Experience leads me to believe that this, too, is but an acute manifestation of the nephritis. To quote from Parsons: "Acute night blindness is associated with defective nutrition, such, for insance, as we find in nephritis. . . ." We must not overlook the fact that the only invariable changes in eclampsia are those of the liver. In many post-mortems no evidence of edema of the brain has been found, and in at least one such case there was central blindness.

DR. ALLEN GREENWOOD, Boston: The lesson to be learned from Dr. Holden's paper and Dr. Randolph's discussion is: early delivery of these patients. One must be careful, however, not to give too grave a prognosis as to sight and the future of the patient if there is massive exudate in the retina. Some years ago I saw a woman, aged 40, pregnant, with a very marked neuroretinitis with a high-grade albuminuria. The eye condition recovered entirely after delivery, leaving little signs of trouble. A subsequent pregnancy brought back the kidney and eye condition with almost blindness at the time of delivery and a subsequent recovery and the patient as yet has not succumbed to any kidney disease. I also saw a case similar to the one Dr. Holden reports in which a woman of 25 had homonymous hemianopsia as an accompaniment of an albuminuric neuroretinitis of pregnancy.

DR. WARD A. HOLDEN, New York: It seems to me these cases are of a good deal of interest and importance, and careful study of individual cases with the possibility occasionally of a necropsy will certainly clear up some of the questions which now are obscure.

TWO CASES OF ACUTE RETROBULBAR NEURITIS, ASSOCIATED WITH MARKED ACETONURIA*

LEE MASTEN FRANCIS, PH.B., M.D.
BUFFALO

The two cases of acute retrobulbar neuritis presented in this report are of interest because a thorough physical examination by competent observers revealed no definite findings except the presence of a pronounced reaction for acetone in the urine. Both patients were young, one a girl of 8½ and the other a man of 31. The girl had been an exceptionally healthy child, while the man gave a history of a previous attack of colitis coincident with marked acetonuria. Both lived under ideal hygienic conditions, being members of families in more than comfortable circumstances. In both cases, hysteria, disease of the nose and accessory air-passages, alcohol, tobacco and drugs could be eliminated with certainty, nor were there any grounds on which the likelihood of chemical or ptomain poisoning might be entertained.

While blindness from retrobulbar neuritis occurs in diabetes, as a rule the patients are past middle life, very much broken down, or well advanced in the disease. I have not been able to find cases reported occurring in young persons associated with a decided acetonuria and with no other likely etiologic factor.

CASE 1.—A. A., aged 8½, the daughter of well-to-do parents, consulted me Feb. 12, 1910. The family history was good. The child had always been exceptionally well and healthy and had lived under ideal conditions. There was no history of gastric disturbances, no coryza, injuries or illnesses of any sort. No visual disturbances had been observed by patient, parents or teachers, until a few days ago the girl complained that she could not see the blackboard in school and that the print in her books was not clear. At about the same time she complained of dull frontal headaches, and her mother remembers that she was somewhat nauseated when riding on the street-cars.

Examination.—The patient is a well-nourished, healthy appearing girl of normal size and weight, of good color and presence. The pupils are of normal size, equal and respond readily to all reflexes.

O. D. V. = 6/15
O. S. V. = 6/15

Muscles: 1° exophoria with Maddox rod. The fundus examination without mydriasis showed the disks to be of normal appearance, retinal vessels normal. Not suspecting the nature of the case, I ordered a 1 per cent. atropin solution to be instilled three times daily, and the patient was requested to return three days later for refractive examination under cycloplegia.

February 15, the patient returned, the atropin having been used as ordered.

The retinoscope showed:

O. D. + 1.00 cy. ax. 105°
O. S. + 1.00 cy. ax. 75°

Vision (under atropin):

O. D. V. = 6/22.3 + 1
O. S. V. = 6/22.3 + 1

* Read before the Section on Ophthalmology at the Sixty-Fifth Annual Session of the American Medical Association, Atlantic City, N. J., June, 1914.

A careful test with trial lenses showed that while the cylinders indicated by the retinoscope made the test-letters more distinct, they did not improve her ability to read. A test was then made of her visual fields by means of colored disks on the end of a rod. The fields for white appeared normal, but there was a total lack of recognition of the red disk in the fields of fixation. The blue field appeared normal; green and yellow were not tested.

The eyeballs were not tender on pressure. The fundus examination revealed no change in the appearance of the nerve-head or retinal vessels.

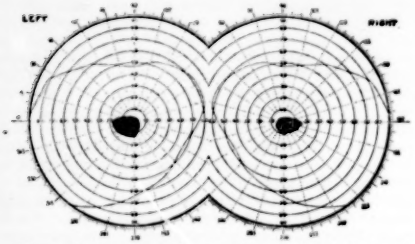

Fig. 1.—Absolute scotoma for red, white and blue fields normal.

The patient was then referred to Dr. F. W. Hinkel for examination of the nose and air-passages and to Dr. N. G. Russell for a thorough physical examination.

The examination of the nose and air-passages was reported as absolutely negative.

Dr. Russell's report is as follows: I have examined A. A. carefully and have found her normal in every way except possibly somewhat nervous. The blood is fully up to standard except that hemoglobin is a little low. The urine is perfectly normal except a decided reaction for acetone and a slight reaction for diacetic acid. This is rather unusual in a full diet such as she has been on.

Feb. 21, 1910, the patient returned to me, the effects of the atropin having thoroughly passed away. At that time:

O. D. V. = 6/12 + 1
O. S. V. = 6/12 + 2

Plus cylinders, while improving the above letters do not add to capacity to read smaller letters. The fields were then charted on the perimeter (Fig. 1.).

A urinalysis made by Dr. Russell, February 25, showed a mild acetone reaction but no diacetic acid. Having been under a regulated diet, ordered by Dr. Russell, the patient returned to me, April 25, 1910, at which time O. D. V. = 6/6, and O. S. V. = 6/6. The urine has been free from acetone about two weeks. A test with a red disk showed no color defects. The patient again came under my observation in December, 1910, when she was brought to me complaining of asthenopia and headache dependent on eye use. Her visual tests at that time were as follows:

O. D. V. = 6/9 — Exophoria 1½, fields negative.
O. S. V. = 6/9 + Fundus negative.

These lenses were ordered and worn during school hours and for near use with a complete relief of the symptoms.

May 28, 1913, the patient again returned, saying that the lenses had not been worn during the past year. For the past two weeks her headaches and asthenopia had returned. Visual examination revealed:

O. D. V. = 6/9 — Exophoria 1½, fields negative.
O. S. V. = 6/9 + Fundus negative.

Under atropin:

O. D. V. = 6/75 — 0.25 sp. = + 0.50 cy. ax. 90° V. = 6/5
O. S. V. = 6/6 + 0.50 cy. ax. 75° V. = 6/5

A full correction was ordered for school use, which has been worn with comfort.

Case 2.—*History.*—A. G., aged 31, married, department manager of a business firm, consulted me, Jan. 22, 1911. Family history is without incident. He uses neither tobacco nor alcohol, denies venereal disease and describes himself as of "nervous disposition" and as having a "sensitive stomach" and "somewhat run down" from overwork. He says that for many years he has had occasional attacks of what he describes as "intestinal catarrh," for which his physician has prescribed exercise and diet, with relief of symptoms. He has worn lenses for many years, having been examined by Dr. Julius Pohlman of Buffalo. He is wearing:

O. D. + 0.75 sp. = — 2.00 cy. ax. 180°
O. S. + 0.50 sp. = — 1.00 cy. ax. 180°

The glasses have always been comfortable and have given him good vision.

Present History.—He has been in his usual good health so far as he knows, except that he remembers having had a slight attack of indigestion a few days ago which he ascribes to a corned-beef sandwich which he ate at noon. January 19, he noticed that the vision of his left eye was blurred and the sight noticeably impaired. The vision has remained about the same as at first, so far as he can determine. There have been no headaches or dizziness or "colds in the head." His work is not that which would expose him to any poisons in its performance, and he has been taking no medicines of any kind.

Examination.—The patient is somewhat pale, is fairly well nourished and of apparently high-strung disposition. Pupils are of normal size and equal, and respond readily to light, convergence and consensually. There is no tenderness on firm pressure on the globes.

O. D. V. (tested with his lenses) = 6/6
O. S. V. (tested with his lenses) = 6/15

Muscles: 2° exophoria (Maddox rod).

The ophthalmoscopic examination shows the disks to be sharply outlined, of normal color and appearance. The retinal veins and arteries are normal. The circulatory balance is good. There are no abnormal appearances to be noted.

The fields were then tested by means of disks on a rod. While the visual field of the right eye appeared normal for white, blue and red, on the left side white and blue were normal. The patient fails to recognize the red disk in the center of the field. The perimetric chart was then made (Fig. 2).

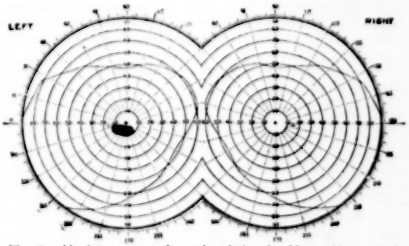

Fig. 2.—Absolute scotoma for red, relative for blue, white normal.

A diagnosis of left retrobulbar neuritis was made. Dr. W. Scott Renner, Buffalo, who made the rhinologic examination, reported that the nose and sinuses were free from disease. Dr. Herbert M. Hill reported a twenty-four-hour sample of urine negative, both chemically and microscopically, but no test for acetone was made. A competent internist, to whom the patient was referred in the temporary absence of his regular medical adviser, reported to me within a few days that he had been unable to discover evidences of hysteria or anything abnormal about the patient. The differential blood-count was negative. Hemoglobin esti-

mate was 75 per cent. At my suggestion the patient was given small doses of calomel, sodium salicylate and sweat-baths. The following days were without incident, beyond the fact that the patient was very apprehensive concerning his condition and became very nervous. I suggested a rest and change of scene. The patient decided that he wanted to go to Lakewood, N. J., so I gave him a letter to Dr. Arnold Knapp of New York, instructing him to consult him during his absence. A few hours before leaving for Lakewood, however, his regular physician, Dr. John Mesmer, having returned to the city, I suggested that he submit a sample of urine to him, and seek his advice.

Within a few days Dr. Mesmer reported to me that the examination of the single sample of urine submitted to him had shown "a very heavy acetone reaction." He also reported that the patient in past years had had several severe attacks of "mucous colitis with crises" and in each instance there had been decided acetone reactions. Each attack had yielded readily to a proper diet and outdoor life with plenty of exercise. During the intervals between the attacks the urine had been free from acetone bodies. Dr. Mesmer had advised the patient to return to his dietary regulations, and to take plenty of exercise during his sojourn at Lakewood.

Following are the clinical records of the case tested with lenses:

Feb. 16, 1911: O. S. V. = 6/7.5 + 3 Scotoma for red tested roughly appears smaller.
Feb. 27, 1911: O. S. V. = 6/6 −3 Urine is free from acetone.
Mar. 29, 1911: O. S. V. = 6/6 +2
Apr. 22, 1911: O. S. V. = 6/6 +2 No scotoma for red.

April 22, 1911, the patient's refraction was gone over under homatropin with the following result:

O. D.—0.62 sp. = + 2.25 cy. ax. 90° V = 6/5
O. S. + 0.62 cy. ax. 90° V = 6/5

The urine gives no acetone reaction. During the past three years the patient has been seen at frequent intervals. During this time visual acuity has remained the same. There have been no attacks of lowered vision in the right eye.

According to von Noorden,[1] "the primary acetone bodies are beta-oxybutyric acid and aceto acid, from which acetone is probably derived as a secondary product . . . by far the most important sources of acetone are the lower fatty acids." Whatever be the source or whether the virulence of the toxin in cases of faulty metabolism be acetone or some antecedent product or products, clinicians recognize that the excretion of acetone is a fair index of a toxemia. While acetonuria is not at all infrequent in children, and to a less extent in adults with gastro-intestinal disturbances, and invariably accompanies starvation, it may be fairly stated that acetone is not found in appreciable quantities in the urine of normal persons, and that its presence is an index of some toxemia of enough virulence to attack nervous tissue.

While it is quite obvious that acetone, beta-oxybutyric acid or aceto-acetic acid exercise no decided selective action on the papillomacular bundle of the optic nerve, yet it appears reasonable that in certain cases it may produce a retrobulbar neuritis, and that these factors should be taken into consideration in the search for possible etiologic factors in cases of retrobulbar neuritis of otherwise obscure origin.

575 Delaware Avenue.

ABSTRACT OF DISCUSSION

DR. G. E. DE SCHWEINITZ, Philadelphia: It would seem to me, in agreement with Dr. Richard's observation, that acetonuria in cases such as Dr. Francis has reported, must be regarded as an accompanying symptom, without direct etiologic relationship to the blindness, and this, I take it, is Dr. Francis's own view.

With regard to the classification of these types of central amblyopia: Certainly the symptoms in no way correspond to those of acute retrobulbar neuritis of the classical type, that is to say, obscuration of vision, beginning always in the center of the visual field and rapidly progressing in from one to eight days to complete or nearly complete blindness; at first, negative ophthalmoscopic appearances, later, blurring of the margins of the disk, hyperemia of its surface, and sometimes, in severe cases, diminished caliber of the retinal arteries and fulness and pulsation of the retinal veins; distinct pain on movement of the eyeball or when the globe is pressed backward into the orbit. If such a condition of affairs as Dr. Francis has described is to be regarded as an expression of retrobulbar neuritis, then it must belong to the so-called attenuated types, but even in these types the scotoma includes the fixing-point, although the depreciation of vision is not nearly so great as in the acute or fulminating varieties, and the subsidence of the amblyopia is always much more prompt.

While Dr. Francis' careful examination and observations have excluded hysteria or any other pronounced psychosis, it does not seem to me impossible that scotomas of this character may represent and interpret fatigue of the macular region; indeed, it is well known that temporary central scotomas may have such an interpretation. Usually they exist as small central color scotomas, best detected with a 1 mm. red or green object, and not infrequently the patients have been the subjects of long-standing eye-strain. The peripheral field may be normal, or repeated investigations will sometimes elaborate one of the various fatigue contractions. Sometimes these central scotomas closely simulate the variety produced by toxic amblyopia.

Finally, as has also been suggested by Mr. Gunn, some of the slighter forms of so-called retrobulbar neuritis may depend on an edema which is analogous to the acute swelling of the eyelids, with headaches, occasionally encountered as the result of errors in diet or of intestinal auto-intoxication. It is perfectly conceivable that an edema may arise in the optic nerve which would bring about a condition of elevated pressure in the optic fibers, especially in the neighborhood of the optic foramen. It will be the duty of all of us to see that careful urine examination is made in all forms of central amblyopia, whether they belong to the functional varieties or not, but I suspect, to repeat a former sentence, that the acetone may indicate that some form of toxemia is the responsible agent, which in one instance might produce a fugitive edema of the eyelids, and in another a fugitive edema of the optic nerve-fibers. Indeed, as we all know, one observer is of the opinion that the functional central scotomas, the so-called hysteric manifestations, depend on edemas in the neighborhood of the optic chiasm, analogous to the edemas which this psychosis can call into existence elsewhere in the body.

DR. WENDEL REBER, Philadelphia: About six years ago a young woman, aged 33, came under my observation, a case which I reported before the American Academy of Ophthalmology. Tobacco as a factor could be easily excluded. This has been a complicating factor in many cases of central scotoma in cases in which diabetes was excluded. The patient was neurasthenic, corresponding somewhat to the type to which Dr. de Schweinitz alluded, in that she viciously overworked her accommodative apparatus. She had a central scotoma involving the fixation point. At times sugar appeared abundant in the urine, ranging from 0.5 to 1.5 per cent. for the six years. At times she will show a low acetone reaction; at other times she will be entirely free of it. Her vision at no time has fallen below 6/10. Once it rose to 6/7½. She has continued at her occupation as a secretary. At no time that I have examined her during the six years has she been free from her central scotoma. It is practically the size of the blind spots in Dr. Francis' first case. The case has been one of great interest to me because of the persistence of the scotoma. I have taken the fields at least twenty times. They remain about the same. Accessory-sinus disease was excluded by repeated examination, skiagraphically and otherwise. I saw

1. Von Noorden: New Aspects of Diabetes, E. B. Treat & Co., New York, 1913, p. 127.

the patient about three weeks ago. She has vision still about 6/9, the same scotomata, and about four weeks ago showed some acetone. At the last visit she showed none. The question in the case is the exact cause of this low-grade toxemia.

DR. LEE MASTEN FRANCIS, Buffalo: I want to emphasize the fact that the only thing we could find in these cases was the presence of acetone. Whether it or some parent body was the cause of the lowered vision, or whether it was a psychosis, I am sure I do not know. I thought at first it might be on a hysterical basis, possibly, especially in one case, but careful study by competent observers failed to reveal corroborative evidences of hysteria. I simply report the cases for what they are. Acetonuria was the only finding we could determine in both instances.

A METHOD OF CLOSING PERFORATIONS OF THE SEPTUM OF THE NOSE

W. LIKELY SIMPSON, M.D.
MEMPHIS, TENN.

During the last two or three years, I have adopted the method of inserting a piece of cartilage or bone between the flaps of the mucous membrane after the submucous operation is made in cases in which it seemed to me that there might be a permanent perforation due to a tear in the mucous membrane on both sides of the septum. It occurred to me that in those cases in which there is a perforation of the septum that is not too large, a submucous operation with a transplantation of cartilage or bone or both to that part of the nose in which there is a perforation, together with the arranging and sewing of the flaps, could be carried out with good results. I have adopted this procedure in a few cases with very gratifying results. This cartilage or bone gives a support and a place for attachment for the flap of mucous membrane and this does away with retraction which is so liable to occur without some support. Before I tried this procedure my results in closure of perforations of the septum were almost invariably bad.

It seems to me that the primary incision should be at the anterior end of the cartilage of the septum so that as large a flap as possible anterior to the perforation can be obtained. Instead of cutting through the cartilage when beginning the elevation of the mucous membrane on the opposite side to the incision, it is better to begin the elevation just at the anterior end of the cartilage. One should be as careful as possible in elevating the mucous membrane around the edges of the perforation, as it is only with the greatest care that tears in the mucous membrane are prevented.

After the elevation of the mucous membrane is completed, the cartilage or bone, both anterior and posterior to the perforation, are resected and placed in a normal saline solution. As a general rule the large piece for transplanting would be taken posteriorly to the perforation. The larger the piece the better. If one thinks that a large suitable piece of cartilage or bone will be difficult or impossible to obtain, it is a good plan to transplant from another deflected septum on which a submucous operation is being made. If one uses such a method as Hazletine's, the anterior flap which is to be displaced posteriorly should be on the side of the primary incision, and the flap to be brought forward would be on the opposite side. Of course, the edges of the perforation should be pared. After the flaps have been arranged, the largest possible piece of cartilage or bone should be placed between the flaps, and the stitches applied. One may find it better at times to insert the transplant before cutting and arranging the flaps.

After the stitches are applied, the packing of both sides of the nose is done with more care than is usually necessary after an ordinary submucous operation. The packing should be kept in two or three days. After the packing is left off a small amount of cotton may be applied over the flaps to keep them from being dried. Ointments also may be used with advantage to prevent drying of the flaps. Some variation at times in making the incision, flaps, etc., would be necessary, depending on the position, size, etc., of the perforation, but the all-important thing is to get a large piece of cartilage or bone or both anterior or posterior to the perforation and transplant this segment so that this whole area is filled in by the transplanted cartilage or bone; if possible, this transplant should be covered with mucous membrane on both sides. If only partially covered, of course, this transplant will become covered with granulations and later by epithelium and a good final result obtained; but of course this would prolong the after-treatments.

I present this procedure, thinking that it might be of assistance to some one in this obstinate class of cases.

930 Exchange Building.

SUPPOSED POISONOUS PROPERTIES OF CHESTNUTS GROWN ON TREES AFFECTED WITH CHESTNUT BLIGHT

C. DWIGHT MARSH
Physiologist, Office of Drug and Poisonous Plant Investigations, U. S. Department of Agriculture
WASHINGTON, D. C.

In October, 1913, there were a large number of newspaper reports that chestnuts collected from trees affected with the blight had poisonous properties and were producing cases of disease and death. These cases were reported from the vicinity of Hartford, Conn., from both western and eastern Massachusetts, and one case each from New Hampshire and New Jersey. One news item was to the effect that in Framingham, Westboro and the surrounding towns of eastern Massachusetts there was an epidemic resulting from eating these chestnuts. A report from western Massachusetts stated that gray squirrels were dying, presumably from eating chestnuts from these blighted trees.

The matter was deemed of sufficient importance for at least a preliminary investigation, and Dr. T. C. Merrill, Assistant Forest Pathologist, was detailed to make an examination of the cases reported from Hartford and vicinity. Inasmuch as his report was not conclusive, I, accompanied by Dr. Merrill, made a careful examination of the reported cases in Massachusetts and New Hampshire. It was found that the cases in western Massachusetts were reduced to two. A conference with the attending physician in these cases made it clear that in one instance the illness was not connected in any way with chestnuts, and, in the opinion of the physician, there was no evidence that the illness in the second case was caused by chestnuts, although the patient had been eating nuts which came from an area in which some of the trees were affected with blight.

The story that gray squirrels were dying from this cause was found to be based on the fact that a game-warden had found two dead squirrels which had apparently perished from disease, as there were no shot marks on them. The publicity which had been given to the subject had caused something of a local scare, and the schoolteachers had instructed the children to eat no chestnuts, the result being that no chestnuts were on the markets, and the dealers had been obliged to throw away their stock of nuts.

In eastern Massachusetts, an examination of the reported cases and conferences with physicians and health officers brought out the fact that there was not a single case of illness that could be attributed to the eating of chestnuts either from healthy or from blighted trees.

Only one case had been reported from New Hampshire, and this was found to be a case of severe illness following the ingestion of a considerable number of chestnuts, but the tree from which these nuts had been gathered appeared to be entirely healthy. A careful examination by Dr. Merrill brought out no evidence of the presence of blight. It is true, however, that the tree is located in a region in which the blight exists, and as it is sometimes difficult to detect the disease, it cannot be stated positively that the tree was entirely healthy. The attending physician very kindly gave a detailed account of the case, in which the symptoms had been decidedly puzzling, but he himself was not ready to diagnose the trouble as due to chestnut poisoning.

RESULTS OF FIELD EXAMINATION

Dr. Merrill,[1] as already reported in THE JOURNAL, tabulated the symptoms observed in the cases. A careful examination of the detailed report of these twenty-one cases, as tabulated by Dr. Merrill, shows that only one case could definitely be connected with the eating of chestnuts from a blighted tree. This was the fatal case, numbered 3 by Dr. Merrill, and in this case there was no clear evidence that the disease was caused by the chestnuts. In only one of the other cases, the New Hampshire case, numbered 21 in Dr. Merrill's table, was there a definite connection between the eating of chestnuts and the illness, and in this case the chestnuts were from an apparently healthy tree.

It is well known that raw chestnuts are not very digestible (Saiki,[2] Merrill,[3] Jaffa[4]). It is also well known, at least in New England, that many persons have an idiosyncrasy which makes the eating of any considerable number of raw chestnuts harmful. It is well known that children, eating too many of these nuts, frequently are affected with sore mouths and with skin eruptions, and most of the described details of the symptoms of the cases investigated can be explained on the basis of an idiosyncrasy of this kind. This is so evident that it seems unnecessary to go into a detailed discussion of the symptoms in these cases.

The final result of the field examination, then, made it clear that there was no evidence whatever that nuts from trees affected with the chestnut-bark disease produce illness.

1. Merrill, T. C.: Is there a Toxemia Referable to the Eating of Chestnuts? THE JOURNAL A. M. A., Jan. 24, 1914, p. 289.
2. Saiki, T.: The Digestibility and Utilization of Some Polysaccharide Carbohydrates Derived from Lichens and Marine Algae, Jour. Biol. Chem., 1907, ii, 251.
3. Merrill, L. H.: Digestion Experiments with Chestnuts, Bull. 131, Maine Agric. Exper. Station, 1906, p. 146.
4. Jaffa, M. E.: Nuts and their Uses as Food, Farmers' Bulletin 332, U. S. Dept. Agric., 1910.

LABORATORY EXPERIMENTS

In order, however, to make this conclusion more certain, it was thought best to carry on some detailed experiments in the laboratory. Chestnuts were obtained from areas affected by the chestnut blight, and as many as possible were collected from the trees which were supposed to be associated with the cases of illness. The material collected was fed to white rats, rabbits and a monkey. A considerable quantity of the material collected from one of the trees which was supposed to be connected with one of the fatal cases in Connecticut was fed to the monkey, which ate it greedily.

All these feeding experiments were negative. Inasmuch as no results were obtained, it does not seem at all necessary to go into the details of the feeding experiments, which were carried on in the laboratory of the Office of Poisonous Plants by Mr. A. B. Clawson, physiologist. Mr. O. F. Black, chemical biologist, made some extracts of chestnuts collected from a Connecticut area infested with the chestnut blight, and these were administered to mice in the form of hypodermic injections, with no result. Mr. Black also made a chemical examination of the nuts with reference to the presence of any toxic principles and found none.

SUMMARY

1. An examination of the reported cases of poisoning from eating chestnuts collected from trees affected with the chestnut blight showed that there was no evidence that nuts from blighted trees contain any more deleterious properties than those from healthy trees, and the symptoms which had been supposed to be connected with blighted chestnuts could in almost all cases be explained as symptoms which would be produced by healthy chestnuts in some persons.

2. Laboratory experiments in feeding the whole fruit, in the use of extracts and in chemical examinations failed to show any toxic properties in the nuts.

3. While the results of the investigations were negative, it is believed that the study was sufficiently thorough and comprehensive to show that there is no ground whatever, either in the experience of the physicians or in the results of laboratory tests, to think that nuts from trees affected with the chestnut blight disease are any more injurious than those from healthy trees.

Bureau of Plant Industry.

Permeability of the Intestines in New-Born and Sick Infants

Lawatschek reports experiments (*Prager med. Wchnschr.*, 1914, xxxix, 185) at Prague on the absorbing power of the intestines in young infants. He found that albumin was absorbed through the gastro-intestinal tract so readily that it was speedily found in the urine in infants up to 10 days old and in infants with severe gastro-intestinal derangement at any age. The intestines normally seem to become less permeable with every day after birth, but the albuminuria—testifying to the abnormal absorbing power of the intestines—was manifest up to the tenth day of life, at which time the infants left the hospital. He examined thirty-eight new-born infants and forty-six sick infants, feeding them at one meal with half the beaten white of an egg, undiluted. The liquid part is readily taken but the infants do not swallow the froth, so that the amounts actually ingested are liable to be irregular. All the healthy new-born infants and also the older infants who were sick gave the positive reaction in the urine. The absorbing capacity seemed to parallel the severity of the gastro-intestinal derangement.

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SATURDAY, JULY 4, 1914

THE FUNCTIONS OF THE CORPUS LUTEUM

The histologic features of the corpus luteum — the temporary tissue produced in the ovary as the result of the discharge of an ovum — suggest that it has a glandular character. In the fully formed structure the lutein cells strongly resemble the cells of an ordinary gland in a state of secretory activity and are epithelioid in origin and character. Furthermore, the whole mass has a very efficient blood-supply. It is not surprising, therefore, that the hypothesis of an internal secretion, in the sense in which this term is applied to what are called the ductless glands, was postulated long ago for the corpus luteum.[1] Direct chemical analysis has, as yet, furnished no conclusive evidence concerning this theory. The study of the occurrence or failure of certain physiologic functions and morphologic changes in special parts of the organism relative to the presence or absence of corpora lutea, however, has given a more substantial basis for suggestive hypotheses. The older ones, now regarded as untenable, may be dismissed without more than passing reference.[2] It was once believed, for example, that the corpus luteum "forms a plug of tissue to fill up the cavity of the ruptured follicle and so compensate for the disturbance in the circulatory system caused by the rupture." Another theory held that the purpose of the corpus luteum was to suppress ovulation during pregnancy. As a matter of fact there are animals which ovulate shortly after parturition, although the corpus luteum has not yet disappeared. Leo Loeb, who has devoted much study to this gland, believes that the corpus luteum secretes a substance which inhibits the maturation and rupture of new follicles. In discussing this, O'Donoghue concludes that, although the presence of a corpus luteum tends to retard ovulation, it cannot be asserted at present that this is its main function.

Far more convincing is the evidence that the presence of a corpus luteum is essential to the uterine changes connected with the implantation of the ovum and its maintenance during the early stages of pregnancy.[3] Under the influence of the corpus luteum the uterine mucosa becomes so sensitized that it will form the maternal part of the placenta in response to a certain stimulus which is normally provided by the fertilized ovum, but which may be replaced by a mechanical one. Portions of the uterus transplanted to the subcutaneous tissue also produced deciduomata if transplantation was carried out from five to seven days after ovulation, when the corpus luteum has developed. If, when the uterine tissues were transplanted, the ovaries were also extirpated, it was found that the response was not nearly so marked as if the transplantation alone had been effected and the ovaries not interfered with. These transplantation experiments appear to exclude the possibility that the nature of the stimulation is nervous; and the fact that it is cumulative, even when the uterus is removed to another part of the body, suggests that the stimulus is a chemical one carried by the blood. We see here an example of a highly useful adaptation, most important for the propagation of the species, based on biochemical correlation between different organs.

Of the factors concerned in the development of the maternal placenta the sensitizing substance furnished by the corpus luteum seems to show the highest degree of specificity. The mechanical factor which is involved in the insertion of the ovum can apparently be imitated in a variety of ways, so that the beginnings of placental changes may be initiated even when the ovum is excluded from entrance. The substance which sensitizes appears, according to Loeb, to have a specific affinity for uterine tissue in some, if not in all, species. For this reason extra-uterine, tubal or abdominal pregnancies are impossible in the guinea-pig, for example. In man, in whom these are occasionally found, the specificity in the fixation of the corpus luteum substance may be regarded as less marked.

Not less striking than the foregoing interactions associated with the early changes in pregnancy are the recent hypotheses regarding the relation existing between the corpus luteum and the mammary glands. Certain facts in this connection are commonly accepted. It is known that the removal of both ovaries before puberty prevents its onset with the accompanying growth of the mammary glands. It is further recognized that there may be a growth of these glands at each estrual period. Obviously, hypertrophy of the mammary glands might be due to the liberated ovum or its subsequent development or to some purely uterine factor. That there is, however, really a functional correlation between the growth of the corpora lutea and the mammary glands is shown by the fact that a growth of the latter follows when the corpora

1. Prenant: La valeur morphologique du corps jaune, etc., Rev. gén. d. sc. pures et appliquées, 1898.

2. A recent popular review of the subject is furnished by O'Donoghue, C. H.: The Corpus Luteum, Its Structure and Function, Sc. Progr., 1914, viii, 721.

3. Loeb, Leo: The Experimental Production of the Maternal Placenta and the Function of the Corpus Luteum, THE JOURNAL A. M. A., Oct. 30, 1909, p. 1471.

lutea are produced in animals either by artificial rupture of the follicle or by copulation with a male previously rendered sterile. According to Hammond and Marshall,[4] the mammary hypertrophy can take place in animals from which the uterus has been removed while still immature, thus showing that the uterus is not essential to the development of the organ of lactation. The development of the corpora lutea of pseudopregnancy is further correlated with uterine hypertrophy and hyperemia followed by extravasation of blood. These changes are clearly comparable with those that occur in true pregnancy, and afford a further confirmation of the view that the corpora lutea are a necessary factor in causing and maintaining the raised nutrition of the uterus during the first part of the period of gestation. Recent studies have indeed thrown a flood of light on the function of what was regarded not long ago as an obscure and insignificant vestige of ruptured graafian follicles.

FURTHER DEVELOPMENTS IN THE INVESTIGATION OF THE CHEMOTHERAPY OF CANCER

The excitement that followed Wassermann's publication concerning the healing of mice with inoculated cancers by means of a compound of eosin and selenium is probably well remembered.[5] The great caution he used, in presenting this report, to limit its application to the particular experimental tumors with which he had worked, is perhaps not so generally recalled. Wassermann is too experienced an investigator not to know the dangers of over-rapid generalization from an isolated fact, and he foresaw the immediate furor that would arise concerning the new "cancer cure"; hence he carefully and specifically stated that his results had been obtained with mouse tumors only, and that no clinical application of them had been made. The wisdom of his conservatism has been shown by subsequent events. Not only has no remedy for human cancer yet been produced through this development of Ehrlich's principle of specific chemotherapy, but even its being really a specific curative agent for mouse cancer has recently been made doubtful through the work of Keysser, who was one of Wassermann's collaborators in the original publications. This, by the way, is a good illustration of the fact that real scientists do not hesitate to bring forth evidence against their own work when they can find it.

Keysser's new observations[6] are based on new methods of experimentation, whereby inoculations are made into various viscera instead of subcutaneously as has previously been the almost universal method. The importance of this lies in the fact that the inoculated tumors when growing in the subcutaneous tissues have little tendency to infiltrate, and with many strains do not often produce metastases. In these respects they resemble benign tumors rather than carcinoma. The lack of infiltrative tendency seems to depend, at least in part, on the looseness of the subcutaneous tissues of the mouse, which permits the formation of large growths without the development of sufficient pressure to force the tumors to grow by infiltration rather than by expansion. When the same tumors are inoculated into the muscles or viscera they assume a typically infiltrative character, and are more prone to produce extensive metastases. After developing a technic that permitted of inoculation into the viscera with a large percentage of takes, Keysser investigated the action on such visceral tumors of various drugs that had been found effective in curing subcutaneous tumors. The results were entirely negative, not only with Wassermann's selenium-eosin compound, but also with Neuberg's copper-glycocoll salt and various selenium-vanadium preparations, all of which produce retrogression regularly in subcutaneous tumors of the same strains. Not only were these agents ineffective in destroying the tumors, but also the eosin compounds, which were found to accumulate specifically in the subcutaneous tumors, did not stain the visceral tumors more than they did the normal tissues, and showed no evidence of specific affinity by either accumulation or retention. While subcutaneous tumors under this treatment show a liquefactive necrosis, followed by healing, the visceral tumors of treated mice showed no such softening, and grew and caused metastases and death just as did the tumors in control animals that received no treatment. The same negative results were obtained with tumors in many different organs, and with different strains and types of inoculable mouse tumors, including both carcinoma and sarcoma.

The explanation of this difference of effect of chemotherapeutic agents on subcutaneous and visceral tumors, as arrived at by Keysser, is both interesting and significant. He observed that while these drugs destroyed tumors that had reached some size, they do not prevent the development of tumors from a fresh inoculation made just before treatment was begun; also they do not readily kill tumor cells mixed with the drugs *in vitro*. Hence it seems that, despite their ability to destroy tumors of size, the drugs in question can scarcely be considered specific curative agents for mouse cancer, since they cannot prevent fresh inoculations from taking root and growing just as fast as they do in untreated animals. Their destructive effect on the larger tumors is ascribed by Keysser to the fact that when the effects of treatment are being studied the tumors are subjected repeatedly to palpation, which causes hemorrhage and necrosis in the tumors, and the drugs found effective in causing

4. Hammond, J., and Marshall, F. H. A.: The Functional Correlation Between the Ovaries, Uterus and Mammary Glands in the Rabbit, with Observations on the Oestrous Cycle, Proc. Roy. Soc. London (B) 1914, lxxxvii, 422.

5. The Application of Chemotherapy to Cancer, editorial, THE JOURNAL A. M. A., Jan. 13, 1912, p. 120.

6. Keysser, F.: Zur Chemotherapie subkutaner und in Organen infiltrierend wachsender Mäusetumoren, Ztschr., Chemotherap., Orig., 1914, ii, 188.

softening and disintegration owe this to their ability to stimulate autolysis, whereby they cause rapid softening to take place in the necrosed tumor tissue. Furthermore, areas of necrosis and hemorrhagic extravasations are sites wherein many foreign chemicals tend to accumulate, a fact which accounts for the apparent specific affinity of the eosin compounds for the tumor tissue. It is because the visceral tumors are not subject to equal manipulation and trauma that they do not undergo corresponding softening and retrogression under the influence of the drugs. As proof of this, Keysser found that if he treated mice with subcutaneous tumors with the usual doses of eosin-selinate, but carefully refrained from palpating and manipulating the tumors, they did not retrogress under the treatment but grew like the controls. The healing of mouse tumors thus far obtained by chemotherapeutic methods resolves itself, therefore, into the production of hemorrhage and necrosis through mechanical means, and an augmentation of autolysis by the drug. If no injury is produced in the tumor, the drug of itself has no effect in modifying the growth of the tumor.

All this does not signify, by any means, that no progress has been made—merely that we are not so near the goal as we had hoped. These observations have increased greatly our knowledge of the growth and behavior of tumors under certain influences, have developed new and valuable methods of investigation, and have pointed out other possible routes along which progress may be made. Also, they teach emphatically the necessity for scientific conservatism, especially when we are contemplating so exciting a subject as the treatment of cancer.

THE THYROID AND THYMUS IN RELATION TO DEVELOPMENT

In speaking of growth or development those who do not give close attention to the problems involved in this phenomenon usually emphasize primarily the increase in size or weight which familiarly characterize it. The growth of the organism as a whole, particularly at an early period, is accompanied by another feature, that of differentiation. The changes in form and weight do not consist merely of additions to the tissue elements already laid down, but frequently also include those alterations whereby new types of structure are added to or evolved out of the primitive ones originally present.

The striking experiments of Dr. Gudernatsch[1] of the Department of Anatomy at Cornell University Medical College in New York lend a peculiar emphasis to the fact that in development we may deal with two entirely separate factors, one of growth and one of differentiation. This was brought out by feeding to developing tadpoles certain mammalian glands with so-called internal secretion. The results, which have now been abundantly verified, leave no doubt that the thyroid gland contains something which, when the gland is given as food, calls forth a rapid differentiation in a developing vertebrate organism. This may be brought about at any stage of development before maturity is reached. The differentiation may therefore be highly precocious if the treatment is begun on extremely young animals. For example, tadpoles could actually be brought to the point of metamorphosis within eighteen days after hatching, while normally they would require ten or twelve weeks to reach such a stage. The results of this premature metamorphosis are perfect frogs of minute size—pygmy frogs. The thyroid influence is very decided and no tadpole given a thyroid diet escapes from it. Each individual, even if thousands be employed, as was the case in several experiments, will react almost immediately to the thyroid stimulus, so that certain changes in its structure may be observed twenty-four hours after a single feeding of thyroid. Although the time of reaction and the nature of the response vary somewhat with the character of the previous or simultaneous food-supply, there appears to be no complete counteraction against the thyroid stimulus, so that sooner or later any tadpole, receiving thyroid after or mixed with other diets, must respond to its influence.

If thyroid is given to these differentiating animals too rapidly, they usually die very soon after the appearance of their fore limbs and the reduction of their tails; but if they are fed carefully they may be kept alive for several weeks. They will not undergo any further changes except perhaps a continued reduction of their tails, nor will they ever feed again after this differentiation. During this period of excited differentiation, curiously enough, the animals fail to grow. Though the thyroid induces differentiation to a degree not common to other foods, there is no evidence that it possesses any power to prevent growth to the morphologic changes. The suppression of growth may merely be incidental, for rapid differentiation does not allow growth.

The thymus, on the other hand, has the power to stimulate growth, but lacks that of exciting differentiation. Tadpoles feeding on any food (except thyroid) reach a maximum size, and thereupon differentiation begins independently. Thymus-fed tadpoles experience a rapid growth, but fail to be brought to metamorphosis within the usual period. They are slow to develop their hind limbs, even though they grow in size beyond the normal. The thymus therefore possesses a quality that suppresses differentiation in a way not exemplified by any other food used.

1. Gudernatsch, J. F.: Feeding Experiments on Tadpoles I, Arch. f. Entwcklngsmechn. d. Organ., 1912, xxxv, 457; II. A Further Contribution to the Knowledge of Organs with Internal Secretion, Am. Jour. Anat., 1914, xv, 431.

Whether or not other glands share in any degree the accelerating or the depressing power so conspicuously shown by those already described at length, cannot at present be positively answered. The pronounced effects produced in developing organisms by the thyroid and thymus, respectively, at once suggest inquiries of the most diverse character regarding the possible rôle of these organs in the development of the human individual. For the moment we must remain content to record these exceptional experiences which show how specifically our food factors may be related to developmental processes.

THE PATHOLOGIC ACCUMULATION OF BETA-OXYBUTYRIC ACID IN THE BODY

In the intimate study of the phenomena involved in the perversions of metabolism manifesting themselves in ketonuria, attention has been centered primarily in the estimation of acetone either in the excreta or in the organism itself. The analytic problems involved in the accurate measurement of this compound are less difficult and the methods less tedious than those pertaining to the other so-called "acetone bodies," as this group is sometimes collectively called. Yet there can be little doubt that the key to the situation is really to be found in the presence or production of beta-oxybutyric acid which in good measure governs the subsequent appearance of acetone and diacetic acid. In the development of ketonuria, acetone is the first of the three related compounds to appear. When from 0.4 to 0.5 gm. of acetone is present in the day's urine diacetic acid may be found; but beta-oxybutyric acid does not usually become evident until the amount of acetone exceeds 1 gm. After this the chief increase is in the beta-oxybutyric acid, which often amounts to from 30 to 80 gm., whereas the diacetic acid and acetone rarely exceed from 7 to 8 gm.

The presence of considerable amounts of the "acetone bodies" in the urine foreshadows an impending coma and is a familiar symptom in the severer forms of diabetes. It is therefore a matter of no small moment to know where and to what extent these harmful products may accumulate in the body. Beta-oxybutyric acid has been reported to occur in the blood and various organs of patients dying in diabetic coma, figures as high as 0.4 per cent. being reported for the blood. With improved methods of analysis Sassa[1] has observed that the blood and organs of man and various animals in health normally yield traces of beta-oxybutyric acid. The distribution of the compound throughout the parts of the body is fairly uniform and the content in the organs is expressed by quantities of the magnitude of from 0.01 to 0.02 per cent. In experimental diabetic conditions there may be a decided increase in the amounts found in the tissues; yet the proportions retained in the body at any moment are at best small in comparison with those eliminated by the kidneys in the urine. On the other hand, the organs obtained from a patient who died in diabetic coma showed a decidedly increased accumulation of beta-oxybutyric acid in the organism, amounting to eight times the usual "normal" figures. The liver was found to be particularly rich in the acid.

It does not follow from this, however, that the liver necessarily is the seat of formation of the beta-oxybutyric acid; for it is likewise conceivable that the latter is promptly carried to the liver from all parts of the body. Indeed, the distribution of beta-oxybutyric acid in many tissues rather favors the view that the capacity of forming it belongs to the general properties of all tissue-cells. The new facts regarding the actual extent to which such a compound can fail of further metabolism or elimination and thus remain as a menace to the organism which produces it, are in harmony with the serious consequences properly ascribed to the condition attended by severe ketonuria.

1. Sassa, R.: Ueber den Oxybuttersäuregehalt der Organe normaler und diabetischer Individuen, Biochem. Ztschr., 1914, lix, 362.

INDUSTRIAL INSURANCE

THE JOURNAL has called attention to the development of industrial insurance in England, Germany, Norway and other European countries. Especial attention has been given to the experiment now going on in England, following the passage of Lloyd-George's industrial-insurance bill two years ago, by which, at one stroke, fourteen million working men and women, many of whom were unable to pay for medical services under the old plan, were taken out of the field of private practice and were provided with these services, largely at the expense of the state. In Germany, governmental industrial insurance has been in force for a number of years and its scope has been gradually enlarged, until, in some districts, 95 per cent. of the people are said to be affected by its operations. THE JOURNAL has repeatedly expressed the opinion that sooner or later in this country this question will become a matter of vital interest to the public and to the medical profession.

This impression is borne out by a paper on industrial insurance by Dr. J. W. Schereschewsky of the United States Public Health Service, read before the National Association for the Study and Prevention of Tuberculosis.[1] Dr. Schereschewsky's article, although short, should be read by those interested in this subject, and this should include all physicians. Considering the social and evolutionary phases of the question rather than the practical and administrative side, Dr. Schereschewsky finds the explanation for the develop-

1. Schereschewsky, J. W.: Industrial Insurance: Medical Examination of Employees and Prevention of Sickness Its Proper Foundation, Public Health Reports, June 5, 1914, p. 1417.

ment of industrial insurance in the gradual growth of appreciation of the consequence to and the interdependence on each other of the individual members of society. "The bitter lessons taught by the ravages of devastating epidemics, the concentration of population in cities, the high degree of specialization in manufactures and similar conditions have all increasingly emphasized man's dependence upon his fellow and shown us how properly to assess the value of the individual unit to society at large." The efficiency of the social unit is conditioned more by the physical status of the individual than by any other one factor. Inefficiency due to ill health constitutes a burden to be borne by the whole of society rather than by the individual. This is the addition to our social concept which may really be regarded as a new discovery. The sickness and disability of the individual is not a burden which should be borne by the individual alone, but is rather a liability for which society, as a whole, is responsible and which should be borne by it, unless the causes for such disability are plainly the fault of the individual. Industrial insurance is the method by which the burden of physical disability is equitably distributed. In this field, as in all others in which it is possible to ascertain the aggregate result of a limited set of causes, it is inevitable that efforts at prevention should at once be inaugurated. Consequently, as soon as any system of industrial insurance has been in operation long enough to acquire definite data as to the cause of disease, it is inevitable that systematic efforts for the prevention of disease will follow, just as systematic efforts for fire prevention have followed the development of fire insurance. This involves, as Dr. Schereschewsky points out, the detection of incipient defects and diseases among workers and the prevention of the development of diseased conditions by proper precautionary measures. This can be secured only by frequent periodical examination of employees and frequent inspection of their environment. Not only bad shop conditions but the total environment of the worker must be included. This means that the unhygienic home as well as the unhygienic workshop must be found, recognized and corrected, and the entire surroundings of the individual subjected to careful scrutiny. The inauguration of such a system, no matter on what basis or exactly at what point the dividing line would be drawn between the insured and the uninsured, would result in the establishment and maintenance of suitable hygienic standards of living for all classes. Enormous economic gains would result through the reduction in the loss of working-time, the saving in expenses for medical attendance, nursing, drugs, etc., and the largely increased wage-earning capacity through increased efficiency.

Labor unions and workingmen are coming to realize more and more that sound physical health is the only capital which the laborer possesses, and the belief is growing that it is as much the duty of the state to protect and conserve the capital of the laborer as it is to protect the capital of the employer. When labor unions fully realize the importance of this fact, the workingmen of the country will demand that the state take suitable measures for the protection of their health.

Current Comment

SAN FRANCISCO IN 1915

The American Medical Association will hold its next annual session in San Francisco. While the selection of the meeting-place of the Association is always a matter of importance, there is a peculiar appropriateness in meeting next year in connection with the great exposition which is to celebrate the completion of the Panama Canal. While many other organizations and societies will doubtless hold their meetings in San Francisco or its vicinity during 1915, none of them is so directly connected with the exposition and the achievement which it celebrates. Great as were the achievements of the engineers and administrators in rendering possible the completion of the canal, the decisive factor which made its construction possible was the control and practical extermination of infectious diseases. This is the only essential factor in the problem which the French engineers under de Lesseps were unable to master and which the United States under Goethals and Gorgas were able to carry to triumphant solution. The French were not lacking in engineering skill or administrative ability. They had ample equipment, splendid machinery and carefully laid plans, as well as personal determination and endurance; but their laborers died from tropical diseases faster than they could be brought in and set to work. The price exacted in human lives was too great to be paid. In the years which intervened between the collapse of the French efforts and the occupation of the Canal Zone by the United States, much progress had been made in our knowledge of preventable diseases. This, however, would have been of little use had not the Army and Navy Medical Services and the United States Public Health Service been able to furnish trained men who were able to apply the newly acquired knowledge in a practical way and to render this tropical jungle a more healthful place of residence and labor than any of our large American cities. The canal has not merely been completed; it has been completed with a smaller toll of lives than would probably have been exacted from any similar undertaking within our own boundaries, but under different sanitary supervision. When the American Medical Association meets in San Francisco, it can with perfect truth say to the country and the world, "We have a right to meet at this time and in this place because we represent the profession which made possible the construction of the canal which this exposition commemorates." As a commercial undertaking, the Isthmian Canal will doubtless be worth many times over the $300,000,000 which it was estimated that it would cost;

but as a triumphant demonstration of the possibility of modern sanitation it is worth far more than any value which mere money can express. The San Francisco exposition will be a celebration of the most striking achievement of scientific medicine quite as much as a recognition of the successful completion of the greatest engineering undertaking ever conceived.

THE NATURE OF THE CIRCULATORY COLLAPSE IN DIPHTHERIA INTOXICATION

The failure of the circulation, which is a characteristic symptom of the terminal stages of certain infectious diseases and other fatal intoxications, has been ascribed to various factors. The haphazard diagnosis of "heart failure" is no longer permissible in all of the familiar instances of collapse in these cases. There are narcotic poisons which appear to act vigorously and directly on the vasomotor center, leading to extreme depression at a time when the heart itself still seems to be functioning satisfactorily and the respiratory center is still irritable and responsive. Corresponding to this, the circulatory disturbance in certain acute infectious diseases has been believed to illustrate a typical paralysis of the vasomotor center in the medulla oblongata, the heart not appearing to be the weakened link in the chain of circulatory agencies. Experimental infections with the organisms of pneumonia and diphtheria, as well as with cultures of *Bacillus pyocyaneus*, and likewise experimental septic peritonitis, are attended by symptoms which expert observers have declared to be unlike the phenomena of typical purely cardiac weakness in man. The conclusions reached from the investigation of the results of these induced diseases in animals have been transferred to the conditions believed to obtain in cases of related etiology in man.[1] At the laboratory of comparative physiology in the Harvard Medical School, Boston, Drs. Porter and Pratt[2] have examined the nature of the evidence relating to the failure of the circulation in acute infectious diseases, using diphtheria intoxication as the illustrative type. They find that the testimony is essentially negative; that is, the opinion that the vasomotor center is gravely affected or "paralyzed" is based on the failure of most previous observers to obtain any rise in blood-pressure in asphyxia, on stimulation of the nasal mucous membrane or of the sciatic nerve — all procedures which commonly lead to a prompt and unmistakable response through the intermediation of the bulbar vasomotor center. A renewed experimental examination of such responses in animals severely affected by the administration of diphtheria toxin has brought conclusive evidence to the Harvard investigators against the hypothesis that the center is "paralyzed" in diphtheria intoxication even of the severest fatal type. The vasomotor center is not impaired and the cause of the severe collapse in diphtheria must therefore be sought in other factors.

PRESIDENT-ELECT WILLIAM L. RODMAN

THE PRESIDENT-ELECT

In electing Dr. William Louis Rodman President-Elect, the House of Delegates of the American Medical Association has honored an eminent member of the profession, who is widely and favorably known as a surgeon and as a medical teacher. Dr. Rodman was born in Frankfort, Ky., Sept. 7, 1858. His preliminary education was obtained at the Kentucky Military Institute, from which institution he received the degree of Master of Arts. His medical degree was obtained from Jefferson Medical College in 1879, in the hospital of which institution he served as an intern in 1879 and 1880. In 1880 he entered the Medical Corps of the United States Army and was stationed at Fort Sill, Indian Territory, where he served for nearly two years. From 1882 to 1884 he was engaged in practice in Abilene, Texas. He then moved to Louisville, Ky., where he was appointed a demonstrator and clinical assistant in surgery in the University of Louisville, Medical Department. In 1893, he became professor of surgery in the Kentucky School of Medicine, and in 1898 he accepted the chair of surgery in the Medico-Chirurgical College, Philadelphia. Dr. Rodman was Chairman of the Section on Surgery of the American Medical Association in 1897 and in 1900 delivered the Oration on Surgery. He served the Association as Trustee for a term of three years, beginning in 1900, and was for a number of years the chairman of the Committee on Reciprocity until this work was turned over to the Council on Medical Education. Dr. Rodman has contributed largely to surgical literature. Among these articles, his monograph on "Diseases of the Mammary Gland" deserves special mention.

1. Gottlieb, R., and Meyer, H. H.: Experimentelle Pharmakologie, p. 280.
2. Porter, W. T., and Pratt, J. H.: The State of the Vasomotor Center in Diphtheria Intoxication, Am. Jour. Physiol., 1914, xxxiii, 431.

BUBONIC PLAGUE APPEARS IN NEW ORLEANS

As announced in our news columns, bubonic plague has invaded New Orleans. Two cases have been found in the Industrial Home of the Volunteers of America, one death resulting, the post-mortem confirming the diagnosis. Thanks to the ceaseless vigilance of the quarantine officers of the United States Public Health Service, this is but the second instance in which this dread disease has gained a foothold on American soil in the last twenty years, during which time it has made one of its periodic and mysterious circuits of the globe. The four world-wide epidemics of bubonic plague in previous centuries, while carrying unprecedented death and disaster to the human race, did not touch the North American continent, at that time unsettled by civilized men and cut off from communication with the outside world. The announcement of bubonic plague within our borders, if made ten years ago, would have caused consternation and panic throughout the country, while one hundred or three hundred years ago, the disease would probably have been unrecognized and would have smoldered in its characteristic fashion until a large number of cases and many centers of infection had developed. To-day through the knowledge given us by scientific medicine, we know the cause, the method of transmission and the necessary measures for controlling this dread "black death" of history. Knowledge alone, however, will never save. The knowledge must be applied promptly and energetically. No time must be lost in stamping out the infection, which in the case of bubonic plague, is transmitted by rats and fleas. The prompt action of the authorities in New Orleans is in gratifying contrast to the inactivity, delay and evasion of the responsible officials in San Francisco under similar circumstances ten years ago. There has been no hesitation, no attempt to suppress the facts, no "indignation" over the announcement that the health of the city was in danger. New Orleans has learned by years of bitter experience with yellow fever that temporizing and denial always give disease more time to develop. The local health officers promptly recognized the disease. The state health authorities were immediately notified and took action at once. Before the facts had had time to appear in the daily press, the United States Public Health Service had been called on for assistance. Surgeon-General Blue and Surgeon Creel are now in charge of the situation. Wide experience gained in fighting this disease in Honolulu and San Francisco has given General Blue a training for this task possessed by few, if any, other sanitarians, while Surgeon Creel's masterly work in Porto Rico, in controlling the plague on that island, is well known.[1] Swift, decisive and effective action is necessary on the part of local, state and national health officers. The immediate cooperation of the general public and especially of all railroad, transportation and local officials is also necessary. Ports reached by shipping must be watched to prevent landing of the rodents responsible for spreading the disease. It is impossible to state at present the extent of the infection or the number of hidden cases, but we may rest assured that the fight will be waged with the aid of all the weapons of modern science, and that all necessary funds will be promptly provided. Some one has said that the first yellow fever patient always dies, so also with bubonic plague. A characteristic of this disease is that it smolders unrecognized and suddenly breaks out, apparently from a number of different centers of infection. The discovery of two cases in New Orleans indicates that there are other persons infected, and we may look for the report of additional cases in the course of the next week. The country is to be congratulated on the fact that New Orleans and Louisiana have in this emergency wide awake and energetic health officers who have lost no time in acting.

1. Creel, R. H.: Plague Eradication in Porto Rico, THE JOURNAL A. M. A., May 17, 1913, p. 1527.

ATLANTIC CITY SESSION

The annual session of the Association held last week at Atlantic City was a most successful one, both in attendance and in work accomplished. The attendance was larger than at any previous session in Atlantic City. A summary of the registration appears on another page. The activities of the Association were reflected in the work of the House of Delegates and its committees. The proceedings of the House, a report of which appears in this issue, shows well the variety and extent of the activities of the Association. The House of Delegates gave earnest study to the various problems that came before it, and a number of important measures were considered and wisely determined. The work of the Scientific Assembly — that is, of the various sections — was unusually good, the programs were excellent and not a few contributions of great value were presented. The Commercial Exhibit was most creditable, and many spoke of the contrast between this Commercial Exhibit of to-day and that of ten years ago. The Scientific Exhibit was a commanding feature, and the interest shown in it evidenced not only the excellence of the work displayed, but also the practical value to the profession and its interest in scientific research. The social events were well planned and contributed largely to the pleasure and profit of the meeting. The ladies were especially well cared for, and with one accord expressed their appreciation of Atlantic City's delightful hospitality. The members of the local profession were untiring in their efforts to make the meeting one of comfort, as well as of pleasure, and they are to be congratulated on their management of this best-attended meeting the Association has held in that city.

PROGRESS IN THE KITCHEN

The fact that a thing has always been done in a certain way — the mere precedent — limits originality and halts progress. For example: In a recent issue of the *Survey* the question why kitchen sinks have been made so low was discussed. No one seemed able to explain. Finally a certain maker discovered that

the original sinks were made when the washing of dishes and other sink-work was done in wooden tubs with high sides. Such a tub when used in a high sink came up too far, so the sink was made low. Furthermore, as running water and fixed faucets had not long been made, the tub had to be lifted out of the sink, and the lower the sink the lighter the lift. Though improvements in faucets, dish-pans and other accessories of kitchen sinks have been made, no one has seemed to realize that the sink could be improved by raising. So women were — and are — compelled to endure discomfort when doing their ordinary household work. There may be a certain percentage of inconvenience to be reached before the human mind grasps the fact that something must be altered. The wise inventor attains a reputation for brilliancy by making his invention before the need becomes obvious to others.

Medical News

CONNECTICUT

New Officers.—Willimantic City Medical Society, June 3: president, Dr. Laura H. Hills; secretary-treasurer, Dr. Charles A. Jenkins.——Litchfield County Medical Society, one hundred and fiftieth annual meeting at Norfolk, June 12: president, Dr. Elias Pratt, Torrington; secretary, Dr. Charles H. Turkington, Litchfield. Dr. Frederick S. Dennis, New York City, made an address on "Retrospective Surgery," and Dr. William H. Welch, Baltimore, one on "Retrospective Medicine." Dr. John C. Kendall, Norfolk, in his address, traced the growth of the society since its inception, 150 years ago.

ILLINOIS

Psychopathic Hospital Opened.—The newly completed Cook County Psychopathic Hospital, which replaces the old Detention Hospital, was opened June 26. The new institution has accommodations for three hundred patients, and was erected at a cost of $470,000. County Physician Haim I. Davis will be in charge of the hospital. On June 28, thirty patients were transferred from the temporary quarters in the old College of Physicians and Surgeons building to the new hospital.

Chicago

Fresh-Air Tents for Sick Babies.—Sick babies are finding refuge and medical care in the fresh-air tents of the Elizabeth McCormick Memorial fund. Several tents are already established in the poorer districts of the city. For thirty years, up to the year 1910, there was an average of 748 deaths among the infants under the age of 1 year just during the month of July and 635 during the month of August. The low month was November, with an average of 270.

Summer Outings for Poor Children.—Nearly 1,000 poor Chicago children will have been sent to camps and country towns by the United Charities during the ten day period from June 27 to July 7. It is reported that in the five days ending July 1, 365 mothers and children were sent to various camps. Sixty-five tuberculous children were sent to a special camp on Hickory Creek, near Cherry Hill and Joliet. Only $4,000 of the $20,000 needed has been subscribed for the work, according to D. R. Forgan, treasurer of the United Charities. Citizens are being urged to send in contributions.

IOWA

Personal.—Dr. Alice M. Clark, McGregor, has been appointed local surgeon for the Chicago, Milwaukee and St. Paul Railway.——Dr. Robert Stewart, assistant superintendent of the Mt. Pleasant State Hospital for two years, has resigned to take the position of first assistant surgeon in the sanitarium in Wauwatosa, Wis.——Dr. William P. Crumpacker, Independence, has been reappointed superintendent of the Independence State Hospital.

Epileptic Colony.—It has been finally decided that the State Epileptic Colony will be established on a 1,000-acre tract of land on the interurban line, near Woodward. The cottage construction plan is to be used, each building to be three stories high, of brick and tile construction and to accommodate fifty patients and their caretakers. Several of these cottages are to be arranged in a semicircle, an administration building overlooking them, a central heating station being located in the rear.

NEBRASKA

Northwestern Physicians Organize.—On June 6, physicians from twenty counties met with the Cherry County Medical Society at Wood Lake and organized the Northwestern Nebraska Medical Society. Dr. James M. Tische, Wood Lake, president of the Cherry County Medical Society, entertained the visiting physicians at the Wood Lake Hotel, and also acted as chairman of the meeting. Preliminary steps toward the formation of the society were taken, but the formal organization was postponed until a meeting to be held at Long Pine, July 23. Dr. Walter S. Gates, Kilgore, acted as temporary secretary of the meeting.

MARYLAND

Corner-Stone Laid.—The corner-stone of the John Hubner Psychiatric Hospital, which Maryland is erecting for the care and treatment of acute cases of insanity, was laid June 25. Dr. William A. White, superintendent of the Government Hospital for the Insane at Washington, delivered the address entitled "The New Ideal." Dr. J. Clement Clark, Sykesville, the superintendent, presided at the exercises.

Increase of Tuberculosis Nurses for Baltimore.—A large increase in the number of tuberculosis nurses is under consideration by Health Commissioner Nathan R. Gorter in connection with the reorganization of the department recommended by the United States Public Health Service. There are now seventeen nurses including the chief of the division. It is stated that the force will be increased to thirty-six in the near future. The seventeen nurses now have nearly 4,000 patients under their care. More than 7,000 visits to homes were made during May.

Report of Johns Hopkins Hospital.—The report of Dr. Winford H. Smith, superintendent of the Johns Hopkins Hospital, for the year ended Jan. 31, 1914, shows an increase in the number of patients and a steady gain in usefulness, efficiency and economy. Within the year the Henry Phipps Psychiatric Clinic was opened. Another important event of the past year was the award of the contract and the beginning of the work on the James Buchanan Brady Urological Clinic. The building is to be six stories high and to have accommodations for forty public and twenty private patients. It is expected that the clinic will be open in October. Dr. Smith further stated that the greatest need of the hospital at the present time is a fund which will enable them to run the Harriet Lane Home for Invalid Children to its full capacity of one hundred. At present only thirty-five children can be treated.

MASSACHUSETTS

State Society Meeting.—The one hundred and thirty-third annual meeting of the Massachusetts Medical Society was held June 9 and 10 at the Copley-Plaza Hotel, Boston, and at the Massachusetts General Hospital. Nearly one thousand members and guests were present at the annual dinner at the Copley-Plaza Hotel, at which Dr. Walter P. Bowers, Clinton, retiring president, was toastmaster. The following officers were elected: president-elect, Dr. Charles F. Withington, Boston; vice-president, Dr. Samuel B. Woodward, Worcester; secretary, Dr. Walter L. Burrage, Boston (reelected); treasurer, Dr. Edward M. Buckingham, Boston (reelected); librarian, Dr. Edward H. Bingham, Brookline (reelected), and orator, Dr. Everett A. Bates, Springfield.

Personal.—Dr. John D. Adams, Boston, surgeon-in-chief of the orthopedic department of the Boston Dispensary, has gone to Labrador, where he will perform operations in his speciality at the Grenfell Mission Hospital.——Dr. Frederic M. Briggs has been elected professor of surgery emeritus in Tufts College Medical and Dental School, Boston.——Dr. George B. Magrath, Boston, has been reelected president of the Boston Medico-Legal Society.——Dr. Harold A. Gale, Winchester, has been appointed medical director of the Milk and Baby Hygiene Association.——Dr. William V. McDer-

mott and the other two members of the Salem Board of Health have been summarily removed by the public health director, it is said, because they refused to cooperate with him in attempting to save money in the department.

MICHIGAN

State Health Train.—The Board of Health and Dairy and Food Commission have completed their tentative plans for the tour of the state health train which will leave Lansing, August 2, and will end its tour at Brimley, August 29; after which it will be transferred to Grand Rapids for the week of the state fair.

Personal.—Dr. William H. Price has been reappointed city health officer of Detroit.——Dr. Robert LeBaron, Pontiac, has been appointed medical examiner of the G. A. R. of Michigan.——Dr. and Mrs. Collins H. Johnston and daughters, Grand Rapids, sailed for Europe, June 27.——Dr. Ross U. Adams, Kalamazoo, left for England, June 14.——Dr. Enos C. Kinsman, Saginaw, has been appointed a member of the State Board of Registration in Medicine, vice Dr. Bret Nottingham, deceased.——Dr. Archibald D. McAlpine has been appointed assistant police surgeon of Detroit.

NEVADA

New Appointments.—Dr. Delos A. Turner, Goldfield, has been appointed chief surgeon of the Tonopah and Goldfield Railway Company and of the Goldfield Mining and Operating Company, vice Dr. Eugene A. Wheeler, deceased.

NEW YORK

New Drug Law.—The recently adopted act to amend the public health law of the state in relation to the sale of habit-forming drugs becomes effective on July 1, 1914, and physicians are advised that it is important to make immediate application to the Secretary of the State Board of Health for a supply of medical order blanks for the purpose of providing themselves with morphin, codein, heroin, cocain, etc. It is reported at the same time that the legislature has failed to make an appropriation for the purpose of having the blanks printed.

New York City

Personal.—Dr. Josephine Walter has recently been appointed consulting physician of the medical department of the New York Infirmary for Women and Children and trustees of the same institution. In appreciation of her faithful service and as a token of the high esteem in which Dr. Walter is held, her associates recently presented her with a silver loving-cup.——Dr. William H. Morrison has resigned as a member of the Board of Inebriety.

Baby Hospitals Prepared to Work.—St. Christopher's Hospital, the only infant hospital in the Borough of Brooklyn, which now accommodates forty babies, has purchased land adjoining the institution, on which it is planned to erect an additional building. The institution asks for $150,000 for the building and a like amount for endowment. The Sea Side Hospital of St. John's Guild at New Dorp, Staten Island, began its summer work on June 26. Last summer the floating hospital belonging to this institution carried 28,000 mothers and babies and it is prepared to do even a greater work this year.

The Foreign-Born Population and the Tuberculosis Problem.—Dr. Walter Rathbun, physician in charge of the Otisville Sanatorium, in a recent paper calls attention to the fact that out of 1,197,892 immigrants admitted to this country at Ellis Island during the year 1913, only thirty-eight were debarred on account of having tuberculosis. This represents but a small fraction of the immigrants actually tuberculous. The hospital and sanatorium figures tell a very different story. At the Bedford Hills Sanatorium 84 per cent. of the patients are foreign born and most of them aliens; at the Metropolitan Hospital 51 per cent. are foreign born and 25 per cent. of these are aliens; at the Riverside Hospital, 45 per cent., at Otisville, 42 per cent., and at the Seton Hospital 39 per cent. are foreign born. As the population of New York City includes 40 per cent. of foreign-born people, the proportion of foreign-born patients in these institutions is considerably more than it should be. Dr. Rathbun suggests that the federal government should appoint a committee to investigate this situation and to outline a more thorough system of examination.

Wood Alcohol as an Adulterant.—New York has a strict sanitary code relative to the sale of wood alcohol or preparations containing this drug, either for internal or external use, but New Jersey has more lax laws and consequently many manufacturers in New York make two kinds of preparations, one for sale in New York City and not containing wood alcohol, and another containing this adulterant, for sale in New Jersey. Even the labeling of the preparation as required by the sanitary code does not protect the patron of the barbershop from toilet preparations containing wood alcohol. Since July 1, 1913, the Department of Health has examined 233 toilet preparations intended for external use and the label did not state the presence of wood alcohol in any of the specimens found to contain that adulterant. Of 158 specimens of bay rum examined 61 contained wood alcohol, of 33 specimens of hair tonic 14 contained wood alcohol, of 220 samples of toilet water 11 were found to contain wood alcohol, and of 19 specimens of witch hazel 2 contained it. More drastic legislation designed to prohibit the use of wood alcohol in preparations for external use is now under consideration.

Bureau of Public Health Education.—The Board of Estimate and Apportionment and the Board of Aldermen have approved the proposal of the Commissioner of Health to establish a Bureau of Public Health Education. Dr. Charles F. Bolduan, formerly assistant to the general medical officer of the Department of Health, has been directed to organize a Division of Public Health Education and has been made temporary chief of the division. Among the proposed functions of the bureau are the following: To prepare and publish popular leaflets of public health; to issue press bulletins; to edit the publications of the department; to organize and direct public health lectures, both independently and in connection with existing educational, social, medical and civic agencies; to prepare traveling exhibits on various phases of public health; to prepare and exhibit moving-picture films dealing with the public health; to administer the library of the Department of Health and conduct a journal for study by the department officials; to assist in the organization of a school of sanitary science or in the preparation of practical courses on public health in conjunction with medical schools and colleges, and to inaugurate lecture and study courses within the department for the training of workers.

NORTH CAROLINA

Health Officers' Meeting.—The fourth annual meeting of the North Carolina Health Officers' Association was held in Raleigh, June 15. Dr. William M. Jones, Greensboro, was elected president; and Watson S. Rankin, Raleigh, secretary-treasurer (reelected).

Colored Physicians of State Hold Meeting.—The North Carolina Medical, Dental and Pharmaceutical Association held its twenty-fifth annual session in Winston-Salem, June 18 and 19. The following officers were elected: president, Dr. John W. Jones, Winston-Salem; and secretary-treasurer, Dr. Allen A. Wyche, Charlotte.

New Officers for State Society.—The sixty-first annual meeting of the Medical Society of the State of North Carolina was held at Raleigh, June 16-18, under the presidency of Dr. James M. Parrott, Kinston. Greensboro was selected as the next place of meeting. The following officers were elected: president, Dr. Lewis B. McBrayer; secretary, Dr. John A. Ferrell, Raleigh, (reelected); delegates to the American Medical Association: Drs. John A. Ferrell, Raleigh, and Isaac H. Manning, Chapel Hill; and alternates, Drs. Addison G. Brenizer, Jr., Charlotte, and David T. Tayloe, Washington.

New Members of State Board.—The Medical Society of the State of North Carolina at its recent meeting, elected the following seven members to constitute the State Board of Medical Examiners for the ensuing term of six years: Drs. John Myers, Charlotte; Hubert A. Royster, Raleigh; Isaac M. Taylor, Morgantown; Jacob F. Highsmith, Fayetteville; Martin L. Stevens, Asheville; John G. Blunt, Washington, and Charles T. Harper, Wilmington. The board met for organization June 18, electing Dr. Jacob F. Highsmith, Fayetteville, chairman, and Dr. Hubert A. Royster, Raleigh, secretary.

School for Feeble-Minded Open.—The North Carolina State School for Feeble-Minded opened at Kinston, N. C., July 1 with Dr. C. Banks McNairy formerly of Lenoir, N. C., as director. It is expected to establish in connection with the school a psychologic clinic where children below the average mentality may be carried for expert observation with a view to affording the best facilities for the develop-

ment of whatever individual capacity may be present. In addition it is hoped to aid in the segregation and protection of young girls of defective type during the years of their lives when they are liable to be most exposed to danger.

PENNSYLVANIA

Personal.—Dr. J. C. Wallace Wallin, director of the psycho-educational clinic in the University of Pittsburgh, has resigned to take up similar duties for the St. Louis public schools.——Dr. Charles E. Thompson, Scranton, had conferred on him the degree of M.A. by St. Thomas' College, Scranton, at its annual commencement exercises, June 16.

Fellowship in Medicine Endowed.—Richard Beatty Mellon, Pittsburgh, has endowed a fellowship in internal medicine in the School of Medicine of the University of Pittsburgh. The fellow is to be a resident of a Pittsburgh hospital, and will work directly under the professor of medicine. Mr. Mellon has also provided funds for the erection and maintenance of an electrocardiographic apparatus.

Tuberculosis Notes.—The campaign of the Berks County Tuberculosis Society for its sanatorium at Neversink Mountain has resulted in contributions of more than $8,000 for the maintenance fund.——On Tuberculosis Day at Reading nearly $7,000 was collected.——The hours of the State Tuberculosis Dispensary at Wilkes-Barre have been changed from the afternoon to 10 to 12 in the morning.——Plans have been approved for the new wing to be erected east of the Cresson Sanatorium building to cost $300,000. The institution now cares for 350 patients.

Faculty News from Pittsburgh.—Associate Professor Ralph Edward Sheldon has been promoted to the full professorship in anatomy in the School of Medicine of Pittsburgh, and has been placed in charge of that department.——Dr. Davenport Hooker of Yale Medical School has been appointed assistant professor of histology and neurology.——Dr. Oscar Klotz, professor of pathology, bacteriology and hygiene, is spending the summer in Marburg, Germany.——Dr. James D. Heard, professor of medicine, has sailed for Europe in the interests of the newly endowed fellowship in internal medicine.

Tablet for Dr. Lemoyne.—At the one hundred and thirteenth annual commencement of Washington and Jefferson College, June 24, a tablet to the memory of the late Dr. Francis Julius Lemoyne, a graduate and for many years a trustee of that college and a graduate of the medical department of the University of Pennsylvania, was presented by the Cremation Association of America, in honor of the fact that Dr. Lemoyne was the founder of cremation in America, having built the first crematory forty years ago. On behalf of the University of Pennsylvania, Dr. Robert S. Stewart, Washington, D. C., made an address.

Philadelphia

Forty Years in Practice.—Dr. E. E. Montgomery celebrated his fortieth year of practice of medicine by entertaining the class of 1874 of Jefferson Medical College at the University Club, June 26.

Banquet for Archbishop.—The staff of St. Vincent's Maternity Home and Hospital gave a dinner at the Bellevue-Stratford Hotel, June 2, in honor of Archbishop Prendergast and the board of trustees.

Hospital Dedicated.—The Jewish Maternity Hospital at 532-534 Spruce Street was formally dedicated, June 10. Edward Brylawski delivered the presidential address, and the response was made by Millard Merz, representing the board of directors.

Personal.—Dr. Thomas B. Holloway has succeeded Dr. James Thorington as professor of ophthalmology, Dr. Charles R. Reed has been elected associate professor of ophthalmology, and Dr. George S. Crampton lecturer on refraction in the Polyclinic Hospital.

Physicians Adopt Automobile Emblem.—The Aesculapian Club has announced that its members will have placed on their automobiles an insignia of a serpent twined on a rod, this emblem to be placed on a keystone, enclosed in a circle, on which are the words "Aesculapian" and "Philadelphia."

Relics for College.—David Lewis has announced his intention of presenting the College of Physicians with two relics of the late Dr. Philip Syng Physic, son of Dr. Philip Physic, keeper of the Great Seal under William Penn. These relics consist of the steel plate of Dr. Physic's visiting card and data concerning an unknown portrait in the college.

Coroner's Report.—According to the annual report of the coroner, there were 280 cases of suicide in the city during the year 1913. Of this number, 160 cases were the result of poisoning, 56 by shooting, 26 by hanging, 11 by jumping from high places and 3 by drowning. There were also 99 homicide cases. There were 3,879 inquests held, an increase of 24 over 1912.

First Health Center Opened.—An experiment in child saving was started, June 22, by the Child Federation Health Center, at Twelfth and Carpenter Streets. A preliminary survey of a restricted area was made and 157 children under 6 years of age, belonging to 377 families were found. The Child Federation has pledged itself to be responsible for the health of every one of these. The center has been established in a new house thoroughly equipped from basement to top floor with every facility needed. It is in charge of Dr. Charles V. Dorwarth. There are also physicians, nurses, interpreters, social workers and an office force. The building is fitted up on the first floor with offices and examining rooms. The second floor is reserved for registration and the third floor for living quarters for the housekeeper. The roof garden for mothers with their babies is supplied with awnings and comfortable seats and may be used later, as an open-air sleeping place for sick babies. The entire population of the selected area is Italian. The center will be opened every day from 9 until 5 and will be free to the women and children of that district.

TENNESSEE

Personal.—Dr. Richard B. Maury has been elected head of the Recreation Board of Memphis.——Dr. G. Manning Ellis, Chattanooga, sailed for Europe, June 13.

New Hospital.—A hospital has been established in Clinton by Drs. Samuel B. Hall and J. O. Woods. The hospital is located in the Hall building, which has been remodeled and thoroughly equipped.

Sanatorium Needs Money.—The trustees of the Chattanooga Tuberculosis Sanatorium at Pine Breeze on Walton Ridge have appealed to the Board of Commissioners for $5,000 to liquidate operating expenses.

Eye Infirmary to Close.—Drs. Duncan and Paul F. Eve, Nashville, announce that they will dissolve partnership and close the Eye Infirmary on October 1. Dr. Paul F. Eve will continue in private practice, and Dr. Duncan Eve, Jr., will join his father in practice. The patients at present in the institution will be removed temporarily to the Douglas Infirmary.

TEXAS

Banquet to State President.—A banquet was given under the auspices of the Tarrant County Medical Society to Dr. Frank D. Boyd, Fort Worth, new president of the State Medical Association of Texas, at the Westbrook, Fort Worth. Dr. S. A. Woodward, president of the Tarrant County Medical Society, officiated as toastmaster.

Bats Must Not be Killed.—An ordinance recommended by the Board of Health and various San Antonio medical societies, which had its origin with Dr. Charles A. R. Campbell, San Antonio, makes it a misdemeanor to kill bats within the city limits of San Antonio. Bats, it is declared, are valuable as scavengers and as eradicators of malaria, since they are destroyers of mosquitoes.

GENERAL

Anesthetists Elect Officers.—The second annual meeting of the American Association of Anesthetists was held in Atlantic City, June 2, and the following officers were elected: president, Dr. Charles K. Teter, Cleveland; and secretary-treasurer, Dr. James Gwathmey, New York City.

Students of Feeble-Minded Meet.—The thirty-eighth annual meeting of the American Association for the Study of the Feeble-Minded was held in Columbus, Ohio, June 18. Dr. H. H. Goddard, Vineland, N. J., was elected president and Mr. A. C. Rogers, Faribault, Minn., secretary-treasurer (reelected).

Fraternal Examiners Elect Officers.—At the triennial meeting of the Association of State Medical Examiners of the Modern Woodmen of America, held in Toledo, June 18, Dr. John H. Conway, Cheyenne, Wyo., was elected president; Dr. L. Weatherspoon, Louisville, secretary; and Dr. Frank A. Greedy, Denver, Colo., treasurer.

Medical Milk Commissioners Elect Officers.—The annual meeting of the American Association of Medical Milk Commissioners was held in Rochester, N. Y., June 19. San Francisco was selected as the next place of meeting. Dr. Thomas C. McCleave, Berkeley, Cal., was elected president, and Dr. Julius P. Sedgwick, Minneapolis, treasurer.

Baltimore and Ohio Surgeons' Meeting.—At the annual meeting of the Baltimore and Ohio Association of Railway Surgeons, held in Washington, D. C., last week, the following officers were elected: president, Dr. Page Edmunds, Baltimore; secretary-treasurer, Dr. C. E. Johnson. San Francisco was selected as the next place of meeting.

Urologists Elect.—At the annual meeting of the American Urological Association, held in Philadelphia, June 18 and 19, the following officers were elected: president, Dr. William E. Lower, Cleveland, Ohio; secretary, Henry L. Sanford, Cleveland; treasurer, Dr. James A. Gardner, Buffalo, N. Y. It was decided to hold the 1915 meeting in Baltimore.

Railway Surgeons Hold Meeting.—The annual meeting of the Norfolk and Western Railway Surgeons' Association was held in Cincinnati, June 16 and 17, under the presidency of Dr. Sparrell Gale, Roanoke, Va. The following officers were elected: president, Dr. Philip H. Killey, Vivian, W. Va.; secretary-treasurer, Dr. Thomas D. Armistead, Roanoke, Va.

Annual Meeting of Southern Railway Surgeons.—The nineteenth annual meeting of the Southern Railway and affiliated lines was held in Washington, D. C., June 18 and 19. Asheville, N. C., was selected as the next place of meeting. The following officers were elected: president, Dr. Henry T. Bahnson, Winston-Salem, N. C.; secretary-treasurer, Dr. Jacob U. Ray, Jr., Woodstock, Ala.

Specialists in Study of Exceptional Children Meet.—The National Association for the Study and Education of Exceptional Children will hold its annual meeting in St. Paul, July 7-10, with the Department of Special Education of the National Educational Association. Dr. Emil Schmitt, New York City, is acting president, and Dr. Maximilian P. E. Grossman, Plainfield, N. J., educational director of the association.

To Make Social Study of Palestine.—A commission consisting of Meyer Bloomfield, director of the Vocational Bureau of Boston, and professor of vocational guidance at Boston University, Dr. Milton J. Rosenau, professor of preventive medicine and hygiene at Harvard Medical School, and Dr. Boris D. Bogen, head of the Jewish Charity Work of Cincinnati, has been appointed to proceed to Palestine to study sanitary conditions, vocational opportunities and charitable conditions among the Jews of Palestine.

Welfare Commission for Cripples.—This national commission held its annual meeting in Philadelphia, June 20, following the convention of the American Orthopedic Association. Plans were made for the literature relating to the education and care of cripples and the *American Journal of Care for Cripples* was designated as the official organ of the commission. The following officers were elected: president, Dr. Arthur J. Gillette, St. Paul, Minn.; secretary, Mrs. Edith Reeves Solenberger, Lansdowne, Pa.; treasurer, Dr. John L. Porter, Chicago; editor, Mr. Douglas C. McMurtrie.

Insurance Examiners' Meeting.—At the annual meeting of the American Association of Medical Directors, held in Atlantic City, June 22, the following officers were elected: president, Dr. Augustus T. Gaillard, Philadelphia; secretary-treasurer, Dr. Foster K. Collins, Philadelphia. The representatives of the larger companies present joined actively in the discussion of future aims of the association. These plans will be presented to the Medical Directors' Association and the Medical Section of the American Life Convention, and they will undoubtedly result in improving the quality of the examiners' work and in bringing examiners in closer touch in their methods and ideals.

Congress for Obstetrics and Gynecology.—The Seventh International Congress for Obstetrics and Gynecology will be held in New York, Sept. 14, 15, 16 and 17, 1915. Among the subjects to be read are "The Remote Results of Operations for the Relief of Retrodisplacements of the Uterus, both Simple and Complicated," Prof. Th. H. Van der Velde, Haarlem, Holland; "The Treatment of Puerperal Infections," Dr. Edward P. Davis, Philadelphia, and "The Value of Radio-Activity in Gynecological Therapeutics." On Friday September 17, miscellaneous papers will be read. National societies are encouraged to discuss these subjects at least eight months before the meeting of the congress, and to have reporters collect and digest the discussions and report their conclusions.

Bequests and Donations.—The following bequests and donations have recently been announced.

New York State Women's Hospital, $150,000; Presbyterian Hospital, New York City, $100,000; Manhattan Eye and Ear Institute, $50,000; New York Institute for Deaf and Dumb, $50,000; Memorial Hospital for Cancer, New York City, $10,000; St. Luke's Hospital, New York City, $10,000; Denver Home for Consumptives, $50,000, by the will of Maria DeWitt Jesup, widow of Morris K. Jesup.

New York Eye and Ear Infirmary, $10,000, by the will of Miss Serena Rhinelander.

Presbyterian Hospital, Philadelphia, $5,000, for the endowment of a free bed; Children's Hospital, Philadelphia, $1,000, by the will of Elizabeth N. Brown.

Children's Hospital of Philadelphia, $25,000, for the construction and equipment of an operating pavilion, as a memorial to Mary Bankson King Wainwright, by Miss Hetty M. King.

West Philadelphia Hospital, $98,000 of the $150,000 required in the campaign ended June 26.

Additional Donation to Rockefeller Institute.—Mr. John D. Rockefeller has just donated $2,550,000 to the Rockefeller Institute for Medical Research to purchase additional land in New York City adjoining the present plant, and to erect, equip and maintain additional laboratories. The above sum is in addition to a fund of $1,000,000 for the establishment of a department of animal pathology, of which Prof. Theobald Smith has been made director, as previously announced. The department of animal industry will give special attention to the study of hog cholera, foot and mouth disease, diseases of poultry, etc. Mr. Rockefeller's previous gifts to the institute had amounted to nearly $9,000,000, exclusive of the real estate in New York City, and the endowment of the institute will now reach about $12,500,000, making it the most amply endowed institution for medical research in the world.

An American Journal of Parasitology.—In response to an increasing demand, a quarterly publication on this subject has been founded. It is intended to be a medium for the prompt publication of briefer papers and research notes on animal parasites. Longer contributions of exceptional value may be printed occasionally, but ordinarily single papers will be limited to ten or fifteen text pages and outline drawings will be used as illustrations. The reports of the Helminthological Society of Washington, a brief record of personal and institutional items in parasitology and reviews of books or monographs of special merit are among the features announced. Each number is intended to contain from 70 to 80 pages of text and illustrations and the subscription price is $2 per year. Manuscripts of articles offered for publication, copies of books for review, subscriptions and correspondence should be sent to the Managing Editor of the *Journal of Parasitology*, Henry B. Ward, University of Illinois, Urbana, Ill.

Awarding of the Knapp Medal for Research in Ophthalmology.—In the Section on Ophthalmology at the Atlantic City Session, Dr. Clifford B. Walker, senior house surgeon in the Massachusetts Eye and Ear Infirmary, Boston, was awarded the Herman Knapp Medal for original research in ophthalmology. This medal awarded for original research discovery or for meritorious work for the advancement of the science of ophthalmology is provided for by the Knapp Testimonial Fund, originated in the Section four years ago at the suggestion of Dr. A. E. Bulson, Jr., and administered by the Hermann Knapp Testimonial Fund Committee, of which Dr. Bulson is at present chairman, in honor of the distinguished ophthalmologist, the late Dr. Hermann Knapp of New York. A committee of award is elected each year by the Section to consider the work presented. This is the first medal awarded under the provisions of the fund. The committee this year consisted of Drs. Edward Jackson, Denver; Casey Wood, Chicago, and John E. Weeks, New York. The medal is simple in design, showing in relief a portrait of Dr. Knapp, with a suitable inscription. It is of 22-karat gold, 2 inches in diameter and the designing of the medal, making the die and striking the first copy cost $600. The award was made on the work done by Dr. Walker in connection with his paper on "The Topical Diagnostic Value of the Hemiopic Pupillary Reaction and the Wilbrand Hemianoptic Prism Phenomenon with a New Method of Performing the Latter." A number of ingenious instruments and appliances used in conducting the test were devised and presented by Dr. Walker. At this year's meeting Dr. Walker presented a new clinical instrument for determining the hemiopic pupillary reaction, and in his paper on the subject seems to have established that the Wilbrand

phenomenon is of no value in determining the location of brain lesions.

Plague Outbreak in New Orleans.—On June 27, at 3:30 p. m., Dr. W. T. O'Reilly, Health Officer of the City of New Orleans, reported to Dr. Dowling, the chief health officer, a suspicious case of bubonic plague at the Charity Hospital. A thorough examination, which was confirmed bacteriologically and completed at 6 p. m., showed the presence of *Bacillus pestis*. The patient was a Swede named Charles Lundane, 49 years of age, who had been living at the home operated by the Volunteers of America since June 16. There was no record of previous residence. On the night of the 27th, at 6:30, Lundane died, and the necropsy, which was completed at 8:40, revealed typical bubonic septicemia. In the next room to Lundane, in the Volunteers of America Home, was a man named Rufus Wilkinson. On the night of June 27, Wilkinson was removed to the Charity Hospital, and a tentative diagnosis of plague was confirmed bacteriologically. The twenty-six additional inmates of the home are now under strict quarantine. The place has been thoroughly cleaned and fumigated and all clothing and bedding has been burned.

A joint resolution has been introduced in the two houses of the general assembly at Baton Rouge authorizing the governor to borrow $150,000 to be expended in the eradication of bubonic plague and a rigid quarantine of the infected district by local authorities has been inaugurated. Armed guards have been stationed at intersecting streets within four blocks of the Volunteers of America Home. Only breadwinners will be allowed ingress or egress to the quarantined district, which includes some of the large French markets, many of the commission houses and a number of wholesale houses, and they are required to report three times a day for inspection.

Active steps are now being taken by the state and local authorities to begin eradicative work in the making of a sanitary survey. Surg.-Gen. Rupert Blue and Surgeon Creel are at the scene of the outbreak. As a precautionary measure to prevent the spread of the infection by shipping, Surgeon-General Blue has sent warnings to health authorities of the Atlantic coast states and to those of the Mississippi River states as far north as Iowa, suggesting that they take up the work of rodent eradication actively.

Three suspicious cases have been discovered in Santiago, Cuba, and infections continue to be reported from Havana. No new deaths, however, are reported from there.

Ten cents each for live rats has been offered by the health authorities of Galveston. The rats will be examined for traces of bubonic infection. City, state and federal authorities and business interests combined forces at once for a sanitary campaign. The city of Pensacola offered a bounty of 5 cents on each dead rat delivered to the state laboratory.

The prompt activity of the various local and state health officers and the immediate aid of the Public Health Service in this case offer again evidence of the growing efficiency of American health departments.

FOREIGN

Half-Holidays for Physicians in Bohemia.—According to a report of Consul Frank Deedmeyer, Prague, the Association of German Physicians at Prague has arranged for a half-holiday for its members on Sundays and legal holidays, under a system whereby there are designated in rotation for each half-holiday, certain members of the association who will respond to all sick calls from the patients of any member. The office of each physician not on duty is supplied with a list of the physicians on duty for particular days.

CANADA

Academy of Medicine, Toronto.—The Academy of Medicine, Toronto, has closed its seventh year with pronounced success. There are now 396 fellows on its roll. Of these 350 are resident fellows and 46 non-resident. During the past year Drs. Robert A. Stevenson and Horatio C. Burritt were elected life members, and Sir Rickman J. Godlee an honorary member. The financial report showed a saving account balance of $1,619.54.

Seeking Recompense for Vaccination.—What promises to be the first case of its kind in the Dominion will be the prospective suit of a resident of the town of Waterloo, Ont., against the corporation for $25,000 for damages said to be the result of vaccination on the claimant during the epidemic of 1913 and following an order for general vaccination in Waterloo promulgated by the Ontario Board of Health. Since vaccination the appellant claims to have been in ill health for several months and states he has been advised by medical experts that this is due to the vaccination.

Dominion Medical Council.—The Dominion Medical Council met in annual session in Ottawa, June 18 and 19. Dr. Thomas G. Roddick retired from the presidency and was elected honorary president for life. Dr. Robert S. Thornton, Deloraine, Man., was elected president; Dr. R. W. Powell, Ottawa, registrar, and Dr. Robert J. Gigson, Sault Ste. Marie, Ont., vice-president. The examinations will take place in October in Montreal; and in June, 1915, in Winnipeg. All the provinces were represented at the sessions. The Hon. Dr. Roche, Minister of the Interior, was granted the diploma of L.M.,C.C.

Curtailing Infant Mortality in Toronto.—The June *Health Bulletin* of the Toronto Department of Public Health is devoted entirely to prevention of disease and death during the summer months. Considerable of the space is devoted to the baby. Last year there died in Toronto 949 babies under 2 years of age during the summer months. Most of these were from preventable disease as most of the deaths were due to bottle-feeding. One hundred and twenty of the babies visited by the Department of Health nurses died during the summer months and fifty-eight of these had working mothers. Only two were breast fed.

Personal.—The survivors of the *Empress of Ireland* disaster commended most highly the coolness, resourcefulness and courage of the ship's surgeon, Dr. James F. Grant, a graduate of McGill University of last year.——Dr. Perry G. Goldsmith, Toronto, has gone to England.——Dr. Price Brown, the well-known Toronto laryngologist, had one eye removed in New York for glaucoma.——Dr. Herbert S. Birkett, Montreal, has been elected to succeed Dr. Francis J. Shepherd as dean of the medical faculty of McGill University.——Dr. Kennedy C. McIlwraith, Toronto, has returned after spending several months abroad.——Dr. Chester P. Brown, Toronto, has been appointed assistant medical officer and bacteriologist at the William Head Quarantine Station, British Columbia.——Dr. Herbert W. Hill, director of the Hygienic Institute at London, Ont., has been granted a year's leave of absence and will take part in public health work in the state of Minnesota.——Dr. Thomas G. Roddick, Montreal, has been made a knight commander of the Order of St. George and St. Michael by King George V. The honor is in recognition of the long, faithful and successful services of Dr. Roddick to Dominion Registration.

LONDON LETTER

LONDON, June 12, 1914.

House-Flies and Manure as a Nuisance

A somewhat peculiar case has been before the courts in which the owner of a house and grounds brought an action for damages and for an injunction to restrain a neighbor—a market gardener—from depositing manure so as to constitute a danger to his health and interfere with his comfort by reason of the collection of flies and the offensive smell. The defendant pursued the French system of intensive cultivation, necessitating the application of a large quantity of manure, which was accumulated and matured near the plaintiff's wall. The expert evidence was most conflicting. On the one hand Sir Ronald Ross and others stated that the flies and smell constituted a nuisance, and on the other hand, Professor Kenwood and Mr. Ousten (entomologist of the British Museum) denied this. The judge said that the question was whether the defendant interfered with the comfort of the plaintiff in the occupation of his house according to the ordinary notion of English men and women. He found that during the warm months he did so. With regard to flies the evidence was that the house-fly and lesser house-fly bred by choice in horse-manure, and he could only come to the conclusion that the flies of which the plaintiff complained came from the defendant's manure-heap. He was reluctant to interfere with industry, but he must grant an injunction restraining the plaintiff from depositing manure so as to cause a nuisance.

Opening of a Research Laboratory at Bath

At Bath, the fashionable watering-place of the eighteenth century, a new departure has been made. The Royal Mineral Water Hospital has opened a research laboratory in connection with its wards for the study of the pathology of rheumatoid arthritis—a disease which is much treated by

hot mineral water. The laboratory was opened by Sir William Osler, who said that the time had come when the most careful laboratory work was absolutely necessary, and there was no place in England which possessed a richer store of clinical material for that work than Bath. Laboratory work was of two kinds—routine and research. The former was of immediate, the latter of permanent value. To the latter we looked for knowledge of the causes of obscure diseases. There were two essentials to any really useful laboratory—a good museum and a modern library. The museum should be made of national use, so that any medical man might come to it and study the pathology of rheumatoid arthritis from a wealth of specimens of all kinds. Osler announced that he would contribute $50 toward the founding of the library. Bath had a splendid medical history and it was a pleasure to him to see that it remained worthy of that record, and that in an age of change it was changing with the times.

A New Veterinary Diploma

The Royal College of Veterinary Surgeons has decided to establish a diploma in veterinary state medicine. It is hoped that this will have the effect of bringing human and animal medicine into more intimate relation in the field of public health. It is proposed that the new diploma shall be known as "the diploma in veterinary state medicine," and that the qualification period necessary before entering into competition for it shall be twelve months of membership of the college. Candidates will be required to receive six months' practical instruction in meat inspection, hygiene of byres, stables and markets, under veterinary inspectors or teachers recognized for that purpose by the Royal College of Veterinary Surgeons, and in addition to fulfil a period of six months' attendance at approved courses of instruction on the following subjects at an affiliated school: (1) epizootiology, (2) veterinary hygiene and toxicology, (3) veterinary bacteriology and protozoology, and (4) chemistry as applied to veterinary hygiene. They will be examined orally and by written paper in epizootiology, veterinary hygiene, including meat and dairy inspection, sanitary laws, administration and reporting and toxicology, and veterinary bacteriology and protozoology. Just as the creation of the public health service opened the way to a general and systematized attack on the problems of life conditions, epidemics and food-supply, so, it may be expected, will this departure insure a wide understanding of animal diseases in their various relations, and contribute to the great work of eliminating sources of infection and rendering the public health secure.

Reform in the Law of Divorce

A bill has been introduced into the House of Lords to reform the law of divorce, embodying the principal recommendations of the recent royal commission (reported in a previous letter to THE JOURNAL). It enables husband and wife equally to obtain divorce on the ground of adultery (including any unnatural offense). It enables a judicial separation to be obtained for habitual drunkenness or indulgence in drug habits which render the person a danger to himself or others. A degree of nullity of marriage may be obtained on the grounds (1) of incapacity of either party to consummate the marriage or failure to do so owing to the unreasonable refusal of the defendant; (2) that the defendant was at the time of the marriage of unsound mind or in a state of incipient mental unsoundness which became definite six months after the marriage, or was at the time of the marriage subject to epilepsy or recurrent fits of insanity; (3) "that the defendant at the time of the marriage was suffering from venereal disease in a communicable form" or "pregnancy by some person other than the applicant."

PARIS LETTER

PARIS, June 12, 1914.

Fourth Meeting of the French Medicolegal Society

This was held in Paris, May 25-28, under the presidency of Dr. Guilhem, professor of legal medicine at the Faculté de médecine de Toulouse. A number of foreign members from Switzerland and Belgium were present. Among the questions considered, three were most noteworthy: traumatic pleuropulmonary tuberculosis, the necessity of a medical examination for the young delinquent, and natural mummification.

TRAUMATIC PLEUROPULMONARY TUBERCULOSIS

Drs. G. Brouardel and L. Giroux, in their address, began by establishing an important distinction between traumatism occurring to a person already afflicted with tuberculosis which can then aggravate the existing lesions, and that happening to a person who seems absolutely healthy, but who develops tuberculous lesions following the traumatism. In the first case, the responsibility of the traumatism is limited, since it has only aggravated a state which previously existed; in the second case, the responsibility is unrelieved, because by its influence an apparently healthy person is made an invalid. The name of traumatic tuberculosis should be reserved for the latter form. The determining traumatism, as a rule, affects the thoracic wall; in the majority of cases it is a simple contusion of the thoracic wall; more rarely, a fracture of the ribs; still more rarely, a penetrating wound. So-called traumatic pleuropulmonary tuberculosis develops immediately, or from several days to some weeks after the traumatism, so that the maximum lapse of time cannot be fixed with any exactness. The pulmonary lesion appears sometimes in a place which corresponds exactly to the wounded region; as a rule it is on the same side; more rarely it develops on the opposite side. Pleurisy generally occurs in the bruised side. Traumatism would seem most often to provoke the development of a latent local tuberculosis anteriorly; but recent researches permit the belief that the circulation of bacilli in the blood plays a more important part than has hitherto been supposed.

MEDICAL EXAMINATION OF JUVENILE DELINQUENTS

Dr. E. Martin, professor of legal medicine in the Faculté de médecine de Lyon, pointed out the rapid and constant increase in juvenile criminality. It has become so marked that the prison at Lyons has had to build special quarters for these children. The proportion of illiterates among them is 14 per cent. The accusations are divided as follows: robbery, 45 per cent.; vagabondage, 29; assault and battery, 2 per cent. In 46 per cent. of the cases the child's family had been broken up. Tuberculosis was found in the parents of 20 per cent,. and alcoholism, incontestably, in 20 per cent., very probably in 85 per cent. A psychiatric examination of these children should be obligatory. The majority are mentally weak. Except the unmoral children, they are amenable to attempts at education. Dr. Regis, clinical professor of mental diseases at the Faculté de médecine de Bordeaux, remarked that the law of 1912 concerning juvenile courts, while excellent in theory, could not be applied because the schools for that purpose do not exist. It is necessary, therefore, to confide these children to the Assistance publique, which is not intended or equipped to care for these abnormal children. The situation is deplored on every side. Therefore the following resolution was unanimously passed: "Considering that the majority of these young delinquents are abnormal, the meeting declares that the inquiry enjoined by the law of 1912 cannot be satisfactory or give certain results unless a biologic and psychiatric examination is required as well in the case of every juvenile delinquent."

NATURAL MUMMIFICATION

Drs. H. Verger and P. Lande of Bordeaux reported a case of a woman, aged 70, who had died in the room in which she lived, and whose body had mummified. The death had taken place more than six months previously. Dr. Lacassagne, former professor of legal medicine at the Faculté de médecine de Lyon, reported that a man who had been hanged had been found in a cupboard, through the middle of which a chimney passed, and that the upper part of his body was dried, or rather mummified. Dr. Ollive, professor of clinical medicine at the Ecole de médecine de Nantes, recalled having seen the body of a woman which had been lying on straw in a cellar; it was found in a state of mummification: a limb of this mummy is still in the museum of the Ecole de médecine de Nantes.

Fatal Tetanus Following the Treatment of Scoliosis by Abbott's Method

Abbott's method of straightening the veretebral column in scoliosis calls for the application of felt pads at the point of the costal gibbosity, which, thanks to their elasticity, have the effect of correcting the abnormal protuberance because of their efficacious compression. At the meeting, June 2, of the Académie de médecine de Paris, Dr. Kirmisson, professor of surgical clinics on infants' diseases at the Faculté de médecine de Paris, reported two cases in which the use of this felt had brought on fatal tetanus. The first case was that of a girl aged 17½ years with a large dorsal scoliosis of the right convexity. February 10, she was fitted with a plaster corset, according to Abbott's

method. February 14 and 21, and on March 7 and 21, layers of felt were successively slipped between the apparatus and the costal protuberance. April 1, trismus set in; the plaster corset was immediately taken off and a little eschar was found on the right costal projection. The patient died about forty-eight hours after the crisis. The second case, noticeably similar, was observed in a girl of 19½, who also died from a very acute tetanus in forty-eight hours, in spite of an injection of 20 c.c. of antitetanic serum.

From these two cases, Kirmisson immediately suspected the felt, and when scraps of the felt were planted in bouillon, numerous colonies of virulent tetanus bacilli were found.

Without wishing to incriminate Abbott's method in itself, Kirmisson considers that these facts should be known by all orthopedic surgeons who have recourse to it. It is, of course, very difficult in this method, which involves the use of an energetic pressure, to escape excoriations or even eschars, which, in contact with the tetanus-breeding felt becomes an open door for inoculation. It is accordingly imperative to sterilize the felt before using it. Considering the numerous uses of felt, these facts should be brought to the attention of the Conseil d'hygiène, that the manufacture of felt may be submitted to inspection and the public protected from like isasters.

Nursing-Bottles with Tubes

The law of April 6, 1910, forbids the sale and importation of nursing-bottles with tubes (THE JOURNAL, Oct. 1, 1912, p. 1211), but it makes no mention of the detached pieces. Therefore, the court of Bayeux has just sentenced a dealer in herbs who, without selling complete nursing-bottles with tubes, had in his store all the pieces which, put together, make them.

Monument to Professor Marey

June 3, in the presence of the president of the republic, a statue of the famous physiologist, Marey, was unveiled in the park of the institute which bears his name at Boulogne-sur-Seine. The monument is the work of the chisel of the sculptor Auban. The illustrious scholar is represented seated, observing attentively a group of runners and horsemen. This idea synthesizes in a degree the work of Marey and his favorite study, the graphic representation of motion.

J.-E. Marey was born March 5, 1830, at Beaune. He was an intern in the hospitals in 1855, and a doctor of medicine in 1859; ten years later he held a chair at the College de France, and was elected a member of the Académie des sciences and the Académie de médecine, and founded the physiologic station which has become the Institut Marey. He died in Paris, May 16, 1904. The starting-point of Marey's work was the graphic representation of the movements of men and animals; and to analyze these movements exactly by his method of "chronography," Marey constructed a set of tools. By means of these he set about registering physiologic phenomena (sphygmograph, cardiograph, pneumograph, etc.). All these records were made with a stylus in the form of curves; but Marey did not stop there, and as soon as the first rapid plates appeared he conceived the idea of analyzing movements by successive instantaneous photographs—an idea which led logically to the invention of the cinematograph. Marey's graphic method gave valuable aid not only to physiologic researches, but also to the arts of painting, sculpture and music. Moreover, by his numerous researches on the flight of birds and insects, Marey placed himself in the first rank of the French precursors of aviation.

Personal

At its session, June 2, the Académie de médecine elected Dr. Leon Fredericq, professor of physiology at the University of Liége, and Sir William Osler of Oxford as foreign associates.

BERLIN LETTER

BERLIN, June 13, 1914.

Personal

German physiology lost two prominent representatives on June 5. In Königsberg, Ludimar Hermann, for many years the director of the physiologic institute, died at the age of 75. His literary works are chiefly in the same field in which his teacher, Du Bois-Reymond, secured so many important results of investigation, namely, the field of muscle and nerve physiology. But as has often happened, he reached different results and from a pupil became an opponent. Hermann's Text-Book of Physiology has passed through not less than twelve editions and has been translated into all the civilized languages. He founded and edited the physiologic part of the *Jahresbericht über die Fortschritte der Anatomie und Physiologie* and founded and edited for some years the *Zentralblatt für medizinische Wissenschaft*. Of his popular writings, his treatise on vivisection is particularly well known.

Kronecker, also a former pupil of Du Bois-Reymond and director of the Bern Physiologic Institute, died on the same day as Hermann and at the same age. His chief works were in the field of the circulatory system, and especially he discovered as a result of the investigations of his two pupils, Aronsohn and Sachs, a center for coordination of the movements of the ventricles of the heart. In his laboratory there was also found by Aronsohn, a heat center in the brain by the so-called heat-puncture. The center for swallowing, discovered by him, is also of importance. Other articles dealt with the physiology of smell, voluntary muscle movement, the fundamental laws of reflex action and also the innervation of the respiration. He was the author of an improved technic for therapeutic intravenous infusion of sodium chlorid, and other improvements. A few days before his sudden decease, he participated in the meeting of the German Physiologic Society in Berlin and has left a posthumous work on the action of the Nauheim baths. He died at Nauheim, succumbing to apoplexy during a short vacation trip.

E. Rose, formerly director of the surgical department of the Berlin Bethanien Hospital, died at the age of 78 years. Licensed in 1859, he came to the Bethanien Hospital in 1861 as assistant of the surgeon, Wilms. In 1865 he became a member of the faculty as privat-docent for surgery and ophthalmology. In 1867 he was called to the chair of surgery at Zurich. In the summer of 1870 he was given leave of absence by the Zurich University in order to take charge of the Tempelhof Military Hospital at Berlin. In 1871 he was on the battle-field on the Lisaine where he organized the voluntary hospital service of the city of Héricourt and the vicinity of Belfort. In spite of the great respect in which he was held in Switzerland, the love of his native land drove him to return to Berlin where he was made the successor of Wilms in the Bethanien Hospital in 1881 and professor in the Berlin University.

Rose began as early as 1863 to publish important scientific articles, a treatise on vesicovaginal fistula, and in 1864 an article on the treatment of the sick in tents, which was the precursor of our modern fresh-air treatment. Among his important publications the most notable are on the color-scale invented by him for the investigation of color-blindness, errors of color perception, night-blindness, etc.; also on operations for hernia and operations on the head. Considerable attention was attracted early in the seventies by the announcement of his method for operation on the upper jaw with the head pendent; this rendered superfluous the prophylactic tracheotomy until then regarded as essential. There was scarcely any field of surgery to which he did not render important contributions. In 1903, at the age of 67, he voluntarily resigned the superintendence of the surgical department of the Bethanien.

Friedmann's Remedy

The discussion which followed Karewsky's communication and continued through three sessions of the Berlin Medical Society is essentially a complete condemnation of this preparation which was introduced into the world with so great acclaim. Only one physician, who came from the country, could report any favorable results but these were contested for the most part on the basis of opposite observations by competent judges. Eric Mueller, a Berlin pediatrician, who originally was somewhat favorable to the remedy, had nothing to say in spite of the fact that he had announced that he would discuss the subject, and Kraus, who had given a favorable opinion of the method on the occasion of the demonstration of Friedmann's patients, based more on temperament than on facts, had a statement read by a former assistant which varied from the opinions of the other speakers in no important respect. For the present, the question in regard to this remedy may be assumed to have been settled.

Libel Suits on Account of Salvarsan

Two days ago at Frankfort-on-the-Main a suit was tried against the editor of the *Freigeist* who had made the charge against the Frankfort city administration as well as against Herxheimer, the director of the dermatologic department of the municipal hospital of that city, that the city government was deceiving the public and was taking an inconsiderate attitude in the matter of salvarsan; that helpless prostitutes in the city hospitals were being forced to

undergo treatment with salvarsan which is a remedy dangerous to life. It was charged that these women were used as experiments the same as if they were rabbits; that the physicians were won with titles and money to become the agents of certain profit-seeking business firms to whom nothing was any longer sacred, and the avarice of these people was extending even to deliberate murder. On account of these and similar accusations, the magistrates and Herxheimer brought a criminal action.

The trial, to which a large number of witnesses and experts were summoned, among whom were both the partisans and opponents of salvarsan, ended with the condemnation of the writer to a year in prison. From the account of the proceedings the impression must be gained that the author of the article is at least mentally inferior, but as he was found on the investigation of a psychiatrist to be responsible, he must pay the full penalty of the law. The judge in the sentence gave the decision that the accused had on the ground of frivolity, avarice, desire of advertisement and of sensation, calumniated a prominent municipality and physicians who were doing their duty in a proper manner.

This trial will be followed after a time by a second libel suit which the editor of the *Muenchener med. Wochenschrift* has instituted against Dr. Kanngiesser of Neuchatel, a privat-docent for toxicology. Kanngiesser, who like the Berlin dermatologist Dreuw, has taken the fie'd in the public press against salvarsan, Ehrlich and all those who favor the new remedy, claims among other things, that the medical press and especially the *Muenchener med. Wochenschrift*, are interested in salvarsan in a business way. From the actions of Kanngiesser it would appear there will be reasons also to examine this man for his mental condition. There is every reason to expect that he will also be convicted of libel if his responsibility is conceded.

Museum for Infant Hygiene

June 4, there occurred the ceremonial opening of a museum for infant hygiene which is established in connection with the Kaiserin Augusta Victoria House with a fund of $7,500 (30,000 marks). The mother will find especially in the departments devoted to birth and development, nutrition and care of infants, all that she needs to enable her to care for her child properly. Also she will find good advice with reference to the care of her own person. In the department for birth and development, the changes which the female body undergoes in pregnancy are illustrated by models, preparations, photographs, etc. She will obtain an idea of the process of birth, and at the same time a rational hygiene of pregnancy and the puerperium. In the same department, she will find the laws illustrated according to which a healthy child develops normally.

A more exact idea of artificial feeding is given by the department on milk and artificial feeding. Here is an ocular demonstration of all that is to be observed in securing cow's milk and what must be done to the milk to adapt it for the infant. The dangers of overfeeding and of one-sided feeding with cereals are shown both by word and by picture. In the department for nursing, models and photographs are collected of everything that serves for the nourishment and care of infants. Here are found the best examples of bedsteads, children's carriages, and of bed- and body-linen. One sees what is necessary for an infant's outfit, whether one has a small or a large purse. It is also shown how the individual pieces must be made and how the child should be clothed in the course of the first month.

In the departments for physical care, general hygiene and diseases of infants, a systematically arranged teaching collection of anatomic preparations, models and illustrations demonstrates the difference between the infant's body and that of an adult, and the abnormalities of the former are also shown by pathologic preparations, photographs and models.

In the department of statistics and hygiene, one can inform himself from tables and curves with reference to the number of births and deaths in the German Empire, the reduction in the birth-rate and its significance, the excess of births, the progress in the growth of the population, the number of deaths and the development of infant mortality, its causes and means to remedy them

The department for hygiene gives an illustration of the best and most advantageous means of maintaining the health of infants and the general subject of hygiene.

The especially interesting department of art presents historical pictures from artists of various nations and from all ages showing the life of the nursing mother and the child.

Session of the German Central Committee for the Campaign against Tuberculosis

At this year's meeting, June 4, of the German Central Committee for the Campaign against Tuberculosis, Langstein, director of the Kaiserin Augusta Victoria House for the campaign against infant mortality, delivered an address on prophylaxis against tuberculosis in infants.

PROPHYLAXIS OF TUBERCULOSIS IN INFANTS

Children in the first and second year of life are from eight to nine times more liable to tuberculosis than adults. The very careful statistics of Pollack in Vienna have given the following convincing, although alarming, facts: Among 285 children from families in which there were persons with open tuberculosis (*Bazillenspucker*) there were found 275 with a positive tuberculosis reaction. Among these there were 57 who were first brought into close relation with the bacilli carriers in the third year of life. Among these only 7 showed clinical tuberculosis. Among the 61 who were exposed in the second and third year, there were 45 clinical cases with 7 deaths, and among the 207 who had been exposed since birth, 200 exhibited clinical tuberculosis, of whom 21 died.

The most radical measure against this tremendous danger is to separate the infant from the tuberculous individual. Some years ago Baginsky advised this measure, beginning with the sixth month, but it must be carried out immediately after birth. To be sure, this is difficult to accomplish. A preferable way is that pointed out by Eiffer of Danzig. He investigated separately the children of parents who were under hygienic care for tuberculosis before the birth of the infant, those of parents who received such care from the time of birth, and those who received no care at all. This investigation showed a very marked difference in favor of the early care and evidenced the value of instruction at the right time.

Another possibility of prevention consists in protecting the infant constitutionally against infection. Many regard the substances conveyed by the mother's milk as the best remedy. This has not yet been scientifically investigated with sufficient accuracy, and there remains the difficulty that tuberculous mothers who nurse their children may easily infect them and, besides, weaken themselves. Nothing is to be expected from the so-called method of hardening the infant as a protective against tuberculosis. No one can predict whether or not any further success will be obtained from protective inoculation. There remains, therefore, as the best remedy, early isolation and thorough instruction of families in which the agencies which care for the tuberculous and for infants must cooperate.

The infants of the rich are endangered by the carelessness with which nurses are chosen, and the danger from tuberculous midwives needs attention. Isolation, at least for the first few months, is best carried out in institutions, as there is a danger even with the best foster-mothers. By care in institutions, better views with reference to the question of congenital tuberculosis and the constitutional resistance of tuberculous children will be obtained.

An interesting discussion followed the address in which Umber of the Westend Hospital gave statistics from 600 children, confirming the views of Langstein, while von Drigalsky of Halle expressed uncertainty as to whether the failure to react to the von Pirquet test in the first months of life may not depend on a physiologic lack of capability for reaction. Of those infants which received early protection, he had met a great portion later as school pupils; they had survived, but a large portion of them were scrofulous.

Contagious Diseases among Hospital Employees.—A study of the occurrence of contagious diseases among city hospital employees in New York for the years 1907 to 1913, inclusive, shows that the number of infected varies from twenty to thirty-three for each of these years. The number of employees varied from 349 in 1907 to 856 in 1913. The average of those infected for the second half of the period is distinctly lower than that of the first half, which may signify either lessened susceptibility or greater care among the workers. A large percentage of persons infected were nurses, and the medical interns did not escape. Of the total number infected, however, approximately two-fifths were domestic employees.

Marriages

LEO D. HARMAN, M.D., Forbes, Mo., to Miss Dorothy Newcombe of Provo, Utah, in Omaha, Neb., June 5.

GEORGE KIRBY COLLIER, M.D., Sonyea, N. Y., to Miss Clara Louise Prophet of Mt. Morris, N. Y., June 16.

WILLIAM A. T. RYAN, M.D., Dayton, Ohio, to Miss Catherine Uminger of Pomeroy, Ohio, June 16.

THOMAS HAROLD REAGAN, M.D., Canton, Ill., to Miss Bertha Rhenstrom, in Chicago, June 18.

FRANKLIN EUGENE HAGIE, M.D., Elizabeth, Ill., to Miss Nellie Wells Rae of Chicago, June 30.

ADOLPH KREBS, M.D. Pittsburgh, Pa., to Miss Mary Margaret Wampler of Irwin, Pa., June 17.

ROSS WILLIAM GRISWOLD, M.D., to Miss Camilla Seymour, both of Litchfield, Ill., May 27.

CHARLES E. PARK, M.D., DeWitt, Ark., to Miss Gussie Burnett at Anna, Ill., June 10.

ROBERT P. DEVEREAUX, M.D., to Miss Blanche E. Salfingere, both of Philadelphia, June 17.

HARRY LYMAN WHITTLE, M.D., to Miss Juanita Whittle, both of Baltimore, June 16.

HEPMAN FRIEDEL, M.D., to Miss Marion Levanthal, both of New York City, June 9.

Deaths

Edward Mansfield Shipp, M.D. Medical College of Virginia, Richmond, 1891; a Fellow of the American Medical Association; surgeon lieutenant-commander, U. S. Navy; who entered the Navy in 1893, and whose last duty was that of commander of the U. S. Naval Hospital, Puget Sound; died in that institution, June 17, after ten years and ten months of sea service, and eight years and five months of shore or other duty, aged 45.

William Henry Pomeroy, M.D. Harvard Medical School, 1886; assistant in therapeutics and materia medica in his Alma Mater in 1886-1887; a Fellow of the American Medical Association; contract surgeon, U. S. Army, since 1902; visiting surgeon to the Springfield (Mass.) Hospital and Children's Home; physician on duty at the Armory Barracks and Recruiting Station; died at his home in Springfield, Mass., about June 10, aged 56.

William Spear Ross, M.D. Wooster University, Cleveland, Ohio, 1876; a Fellow of the American Medical Association; and an eye and ear specialist of Altoona, Pa.; local surgeon for the Pennsylvania System at Altoona; surgeon to the Altoona Hospital, and oculist and aurist to Nason Hospital, Altoona; died in the Altoona Hospital, June 12, from uremia, aged 60.

Simon Marx, M.D. College of Physicians and Surgeons in the City of New York, 1884; a member of the Medical Society of the State of New York, New York Obstetrical Society and New York Academy of Medicine; surgeon to New York Maternity Hospital and gynecologist to the Red Cross Hospital; died at his home in New York City, June 16, aged 50.

Lucien Bowyer Robinson, M.D. University of Virginia, Charlottesville, 1851; a surgeon in the Confederate service throughout the Civil War; and until the abandonment of Andersonville Prison, Georgia, on duty at that post; local surgeon of the Norfolk and Western Railway at Shawsville, Va.; died at his home in that place, recently, aged 76.

James A. Martin, M.D. American Medical College, Eclectic, St. Louis, 1884; a member of the Nebraska State Medical Association; while returning from a professional call, June 10, received glass wounds from the broken wind-shield of his motor-car, which caused his death at his home in Minden, Neb., two hours later, aged about 60.

John M. Coonan, M.D. University of Maryland, Baltimore, 1861; for two years health warden of the Ninth ward of Baltimore; assistant surgeon of volunteers during the Civil War, and for twenty years connected with the medical department of the army for Indian Service; died at his home in Baltimore, June 6, aged 79.

Abram L. Haines, M.D. College of Physicians and Surgeons in the City of New York, 1883; major and surgeon of volunteers during the Spanish-American War, with service in the Philippines, and later one of the medical staff stationed at Empire, Canal Zone; died at his former home in Fultonham, N. Y., April 23, aged 55.

Robert Nelson McConnell, M.D. Wooster University, Cleveland, Ohio, 1865; a veteran of the Civil War, during the last year of which he served as assistant surgeon of the One Hundred and Twenty-Third Ohio Volunteer Infantry; died at his home in Upper Sandusky, Ohio, June 16, from cerebral hemorrhage, aged 71.

Charles M. Butterworth, M.D. Medical College of Ohio, Cincinnati, 1889; a Fellow of the American Medical Association; and formerly president of the St. Joseph County Medical Society; for three years county physician and later city health officer of South Bend, Ind.; died at his home in that city, June 12, aged 48.

Daniel E. Cranz, M.D. Hahnemann Medical College, Chicago, 1877; for many years a member of the staff of the Akron (Ohio) City Hospital, and for many years a practitioner of that city; died at the home of his daughter in Oklahoma City, Okla., June 6, from malignant disease, aged 58.

Richard C. Foulke, M.D. University of Pennsylvania, Philadelphia, 1869; a member of the Medical Society of the State of Pennsylvania; for four terms burgess of Newhope, Pa.; president of the borough council, and secretary of the school board; died at his home in Newhope, June 11, aged 70.

John Senter Davis, M.D. Vanderbilt University, Nashville, Tenn., 1892; of Lone Oak, Ky.; a member of the Kentucky State Medical Association; one of the directors of the Paducah Banking Company; died in a sanatorium in Memphis, Tenn., June 15, from heart disease, aged 46.

Arthur Rogers Tiel, M.D. Eclectic Medical College of the City of New York, 1878; at one time secretary of the Medical Examining Board of the State Board of Regents, and health officer of the village of Matteawan, N. Y.; died at his home in Beacon, N. Y., June 1, aged 59.

Maus Rosa Vedder, M.D. College of Physicians and Surgeons in the City of New York, 1861; assistant surgeon in the army during the Civil War; a member of the Medical Society of the State of New York; died at his home in Caldwell, N. J., June 12, aged 79.

John F. Campbell (license, Missouri, 1883); of La Plata, Mo.; for nearly fifty years a practitioner of Macon County, Mo.; a representative in the legislature in 1901 and 1902; died in a hospital in Chicago, June 8, two weeks after a surgical operation, aged 74.

Thomas Smith Hunter, M.D. Jefferson Medical College, 1866; hospital steward of the One Hundred and Sixty-Ninth Ohio Volunteer Infantry during the Civil War; of Ashland, Ohio; died at the home of his daughter in that city, June 7, from heart disease, aged 74.

Francis A. Bizzell, M.D. Southern University Medical Department, Greensboro, Ala., 1877; University of Alabama, Mobile, 1879; of Fillmore, Cal.; was found dead in his automobile near his ranch at Sespe, Cal., June 3, from valvular heart disease.

Thomas Trenaman, M.D. College of Physicians and Surgeons in the City of New York, 1869; for many years president of Kings College, Windsor, N. S., and health officer of Halifax, N. S.; died at his home in Halifax, April 7, aged 70.

James Garvin Schall, M.D. Hahnemann Medical College, Chicago, 1900; a member of the Colorado State Medical Society; and an oculist and aurist of Leadville, Colo.; died in a bank building in that city, June 17, from heart disease, aged 38.

Daniel Langan, M.D. College of Physicians and Surgeons, Keokuk, Iowa, 1863; a veteran of the Civil War; for several terms president of the Clinton County Medical Society; died at his home in Clinton, Iowa, June 13, from nephritis, aged 78.

Frederick Ferdinand Rudolph Berlin, M.D. University and Bellevue Hospital Medical College, New York City, 1900; a Fellow of the American Medical Association; died at his home in New York City, June 14, from hemorrhage, aged 55.

Edgar H. Neyman (license, registration Wisconsin, 1900); a practitioner since 1890; died at his home in Milwaukee, June 7, from pneumonia, aged 48.

Samuel H. Moore, M.D. Indiana Medical College, Indianapolis, 1870; a veteran of the Civil War; and for forty-two years a practitioner of Indianapolis; died at his home in that city, June 15, from cerebral hemorrhage, aged 71.

Edward Anderson Reiley, M.D. New York University, New York City, 1881; for thirty years a practitioner of Atlantic City, N. J.; died at his home in Atlantic City, June 9, from malignant disease of the throat, aged 59.

Calvin George Mohn, M.D. College of Physicians and Surgeons, Baltimore, 1882; for four years postmaster of Laurelton, Pa., and for two terms a member of the general assembly; died at his home in Lewisburg, June 4, aged 56.

Edmond Henry Kyle, M.D. University of Pennsylvania, Philadelphia, 1876; a member of the Medical Society of the State of New York; and for thirty-three years a practitioner of Ithaca, N. Y.; died about June 9, aged 65.

Robert Norton, M.D. Harvard Medical School, 1893; a Fellow of the American Medical Association; assistant superintendent of Johns Hopkins Hospital, Baltimore; died in that institution, June 19, from typhoid fever, aged 47.

Alfred L. Trigg, M.D. New Orleans School of Medicine, 1859; assistant surgeon in the Confederate service during the Civil War; for forty-six years a practitioner of Lockhart, Tex.; died at his home, June 15, aged 79.

Henry T. McKee, M.D. Missouri Medical College, St. Louis, 1884; of Sparta, Ill.; aged 56; a Fellow of the American Medical Association; died in a hospital in St. Louis, June 3, after an operation for mastoid abscess.

Herbert Snowden Fairall, M.D. State University of Iowa, Iowa City, 1903; county physician of Itasca County, Minn., and city physician of Deer River; died at his home in Deer River, June 9, from pneumonia, aged 35.

Thomas G. Fox, M.D. Jefferson Medical College, 1852; one of the oldest graduates of that institution; a member of the state legislature from 1860 to 1862; died at his home in Hummelstown, Pa., June 18, aged 86.

George W. Newman, M.D. New York University, New York City, 1864; surgeon of the Fifth New York Heavy Artillery during the Civil War; died at his home in Brooklyn, June 13, from senile debility, aged 71.

Marcus E. Brown (license, practitioner, Iowa, 1886); for more than half a century a practitioner of Illinois and Iowa; a veteran of the Civil War; died at his home in Clinton, Iowa, June 14, aged 76.

Erastus Moateith Gaston, M.D. Miami Medical College, Cincinnati, 1871; a member of the Ohio State Medical Association; died at his home in West Union, Ohio, February 9, from nephritis, aged 64.

Oliver Perry Mahan, M.D. University of Cincinnati, 1859; a veteran of the Civil War; a graduate in law of the University of Michigan in 1871; died at his home in Lebanon, Ind., June 2, aged 77.

Thomas N. Lownsdale, M.D. Cincinnati College of Medicine and Surgery, 1875; a veteran of the Civil War; died at his home in St. Bernice, Ind., June 15, from cerebral hemorrhage, aged 72.

Thomas McUrgan Hudson, M.D. Washington University, St. Louis, 1894; mayor of Perryville, Mo., for six years; died at his home in Perryville, June 8, from pulmonary tuberculosis, aged 48.

Edwin S. Parker, M.D. Northwestern University Medical School, 1885; a Fellow of the American Medical Association; died at his home in Vermont, Ill., recently, from cerebral hemorrhage, aged 55.

Frederick Johnson Kinney, M.D. Northwestern University Medical School, Chicago, 1912; postmaster of Olds, Iowa; died at his home, June 10, from meningitis due to heat prostration, aged 27.

Harry H. Carnes, M.D. State University of Iowa College of Homeopathic Medicine, Iowa City, 1888; of Champaign, Ill.; died in a hospital in Peoria, Ill., June 8, from disease of the liver, aged 54.

Hugh Willis, M.D. Kentucky School of Medicine, Louisville, 1876; of Summerfield, N. C.; died in St. Leo's Hospital, Greensboro, N. C., June 14, from cerebral hemorrhage, aged 60.

Edgar Augustus Clark, M.D. Dartmouth Medical School, Hanover, N. H., 1884; a member of the New Hampshire Medical Society; died at his home in Concord, May 4, aged 56.

James M. Arnold, M.D. Tulane University, New Orleans, 1871; for more than thirty years a resident of Houston, Texas; died at his home in that city, June 10, aged 76.

William S. Howell, M.D. Atlanta, (Ga.) Medical College, 1893; a member of the Medical Association of Georgia; died at his home in Moultrie, Ga., April 16, aged 47.

Harvey F. Smith, M.D. University of California, San Francisco, 1894; a Fellow of the American Medical Association; died at his home in Pony, Mont., June 11, aged 40.

Winfield Scott Wells, M.D. Rush Medical College, 1890; a member of the Rhode Island Medical Society; died suddenly at his home in Providence, May 2, aged 52.

Archelaus A. Stanley, M.D. Starling Medical College, Columbus, Ohio, 1872; a veteran of the Civil War; died at his home in Rutland, Ohio, March 13, aged 72.

Levi Secord, M.D. McGill University, Montreal, 1876; mayor of Brantford, Ont., in 1893 and 1894; died in the Brantford General Hospital, May 8, aged 60.

Charles B. Lake, M.D. Queen's University, Kingston, Ont., 1866; for more than forty years a practitioner of Ridgetown, Ont.; died at his home, March 18, aged 71.

L. W. Clark (license, years of practice, Illinois); for many years a resident of Rushville, Ill.; died in Carterville, Mo., May 7, from acute gastritis, aged 72.

Martin A. Nelson, M.D. Physio-Medical College of Indiana, Indianapolis, 1894; of Minneapolis, Minn.; died in the St. Paul City Hospital, June 12, aged 54.

William Madison Woodson, M.D. Bellevue Hospital Medical College, 1869; a Confederate veteran; died at his home in Temple, Tex., June 14, aged 74.

Louisa J. Darnstaedt Kean, M.D. Women's Medical College of Pennsylvania, Philadelphia, 1887; of Meriden, Conn.; died in Boston, April 11, aged 69.

Rush Parmenter Brown, M.D. New York University, New York City, 1873; was found dead in bed in his home in Addison, N. Y., April 9, aged 67.

Daniel William Flemming, M.D. Jefferson Medical College, 1889; died at his home in Philadelphia, June 14, from carcinoma of the throat, aged 54.

Alfred Henry Scott Hill, M.D. University of Toronto, Ont., 1874; died at his home in Norwich, Conn., May 16, from cerebral hemorrhage, aged 64.

William B. Richmond, M.D. University of Michigan, Ann Arbor, 1899; of Terre Haute, Ind.; died suddenly in a church in that city, May 10, aged 38.

John N. Lucas, M.D. Pulte Medical College, Cincinnati, 1873; died at his home in Shelbyville, Ind., June 9, from arteriosclerosis, aged 68.

Sanford Junius Deemer, M.D. Western Pennsylvania Medical College, Pittsburgh, 1894; died at his home in Pittsburgh, June 14, aged 56.

Francis Hart Kelley, M.D. University of Louisville, Ky., 1870; died at his home in New Harmony, Ind., from cerebral hemorrhage, aged 78.

Samuel Henry Clay Bixler, M.D. University of Michigan, Ann Arbor, 1870; died at his home in Greencastle, Pa., March 28, aged 69.

Henry H. Pilling, M.D. Hahnemann Medical College, Chicago, 1870; of Tucson, Ariz.; died in Los Angeles, Cal., June 12, aged 68.

George W. C. James, M.D. University of Pennsylvania, Philadelphia, 1864; died at his home in Orbisonia, Pa., April 7, aged 83.

William L. Newlin, M.D. Eclectic Medical Institute, Cincinnati, 1872; died at his home in Los Angeles, June 11, from myocarditis.

John W. Stewart, M.D. College of Physicians and Surgeons, Baltimore, 1878; died at his home in Elmira, N. Y., May 25, aged 63.

Benjamin H. Todd, M.D. University of Maryland, Baltimore, 1874; died at his home in Ridgeville, Md., April 23, aged 50.

Eli R. Tullis, M.D. Hahnemann Medical College, Philadelphia, 1879; died at his home in Camden, N. J., June 12, aged 76.

Lyndsey Oliver Patterson (license, Arkansas, 1903); of Winfield, Ark.; died in Heavener, Okla., June 5, aged 44.

Hiram Luce Chase, M.D. Harvard Medical School, 1846; died at his home in Cambridge, Mass., April 24, aged 89.

The Propaganda for Reform

IN THIS DEPARTMENT APPEAR REPORTS OF THE COUNCIL ON PHARMACY AND CHEMISTRY AND OF THE ASSOCIATION LABORATORY, TOGETHER WITH OTHER MATTER TENDING TO AID INTELLIGENT PRESCRIBING AND TO OPPOSE MEDICAL FRAUD ON THE PUBLIC AND ON THE PROFESSION

ROBINOL AND SEVETOL

Revamping Discarded Theories for Commercial Purposes

It is astonishing how rapidly medical hypotheses become theories and theories are accepted for established facts, when such alleged facts are favorable to commercial enterprise. Yet, as a matter of fact, the manufacturers of proprietary preparations are under a moral obligation, at least, to tell the truth with reference to the scientific basis for their claims. To draw from exploded theories reasons for the use of proprietary preparations is reprehensible, not only because it may lead physicians to use preparations which are worthless, but also because it tends to confirm in the physician's mind, opinions which science has discarded.

Robinol

John Wyeth and Brother put up a mixture of glycerophosphates which they call Robinol. In their description of the properties of this mixture they say:

"Phosphorus exists in the brain, nervous system, and vital organs as lecithin, of which glycerophosphoric acid is the most important constituent and is essential to the vital processes for the reproduction of life and maintenance of metabolism in old age, impotence, etc."

The first impression on reading this sentence is that it suggests that *glycerophosphates* are essential to the vital processes, although the statement strictly applies to phosphorus. The next sentence confirms this impression and the mind glissades from the accepted fact of the existence of phosphorus in nervous tissue to the unfounded hypothesis that the glycerophosphates are necessary to supply the essential element. In the next sentence the circular continues:

"In nervous and general debility the glycerophosphates as exhibited in Robinol, are preferable to the mineral phosphates as they contribute the essential constituent of nerve tissue and are absorbed by the cells more readily than any phosphate of vegetable or inorganic origin."

This statement is utterly unfounded. It is in direct opposition to the conclusions of pharmacologists. The glycerophosphoric acid radical is, to be sure, found in the lecithin of nervous tissues, but its source is not known. There is no evidence either that it must be present in the food or that it must be taken as medicine in order that the brain and nervous tissues shall be nourished. When the glycerophosphates are taken there is no evidence that they enter into the composition of the brain or nervous tissue. They are excreted in the urine and feces as phosphates. It has never been shown that glycerophosphates are absorbed any more readily than other phosphates.

But the advertising circular has still more information to impart to physicians:

"In that group of maladies characterized by faulty nutrition, due to the excessive elimination of phosphorus from the body, as is evidenced by the fatigue and weakness following acute attacks and present in many chronic affections, during the course of fevers and in the later stages of phthisis and all diseases of the nervous system, physicians will find the tonic chalybeate properties of the glycerophosphates of great value."

Physicians know, if the nostrum makers do not, how difficult it is to determine whether there is an excessive elimination of phosphorus from the body. The bulk of the phosphates found in the urine are derived from the food and so little comes from the metabolism of the nervous system that it is not easy to prove that any disease is due to excessive elimination of phosphorus from the body. That fatigue and weakness are due to such a loss of phosphorus is mere assumption, a convenient theory for the exploiters of glycerophosphates. But admitting that nervous waste or faulty nutrition is characterized by the loss of phosphorus, it is easier, cheaper and more rational to supply such loss by the use of phosphorus-containing foods such as milk and eggs, and there is not the slightest evidence that the loss of phosphorus will be influenced in any way by giving a supply in the form of glycerophosphates. Thus, in order to bolster up the sale of a simple solution of glycerophosphates, vague theories and improbable hypotheses are dressed in all the dignity of scientific facts.

Sevetol

There was a time, perhaps a generation ago, when physiologists taught that fats were absorbed into the blood in the form of a fine emulsion. This theory has been definitely disproved and it is now known that fats enter the blood only after a chemical splitting into glycerol and fatty acids, the latter being, to a large extent, combined with alkalies in the form of soaps.

"Sevetol," another Wyeth preparation, is presented to the profession under the claim that it is a very fine emulsion of fats, every portion of which "is readily absorbed through the intestinal wall." To quote:

"The administration of Sevetol, therefore, does not tax the digestive power of the patient, for it is absorbed with very little effort on the part of the digestive apparatus; and even if the organs of digestion be involved, neither the weakness of the patient nor the severity of the symptoms necessarily contra-indicates its use. The amount ingested is limited only by the power of assimilation exhibited in the tissues, and it may be given in large doses for a continued period of time, or until symptoms of overfeeding are produced, such as coated tongue, anorexia, constipation, headache and lassitude. When these symptoms appear, the administration of Sevetol should be temporarily discontinued and a mild but effective laxative given for several days, after which its use may be resumed."

While the language just quoted is a little more exalted and dignified than that found in typical "patent medicine" advertisements, the thought it expresses qualifies it for a place in the "Lydia Pinkham" or "Peruna" class. Every sophomore medical student knows, if he gives the matter any thought, that Sevetol must undergo the same process of digestion as any other fat. It must be broken up into a fatty acid and glycerol, and saponified before it can be absorbed. It is plainly evident that the amount of Sevetol which can be taken is limited not only by the power of assimilation, but also by the power of digestion. The symptoms mentioned in the advertisement and ascribed to overfeeding, are the symptoms, not of a system saturated with absorbed fat, but of digestive organs rebelling against an unusual diet.

The exploitation of Sevetol is but one more case of turning to commercial account an exploded theory. Isn't it about time that our profession demanded that the purveyors of medicinal products tell the truth? And isn't it time, too, that we cease taking our pharmacology and therapeutics from proprietary manufacturers?

Correspondence

Proposed Pneumothorax Association

To the Editor:—The treatment of pulmonary tuberculosis by means of artificial pneumothorax has become quite general all over the country. It frequently happens that a patient who has been under treatment has to remove to another locality for economic or other reasons. In many of these cases it is greatly desirable and necessary that the pneumothorax be "kept up." In the past year, several of my patients have left Denver for Chicago, New York and other cities, and I have wished, in several instances, that I might know of some one to whom I might refer them for further treatment and observation.

For the benefit of such patients and for the furtherance of all questions connected with pneumothorax therapy, I think it would be a good idea that the men who are doing this work form an association. This would enable us to refer such cases to each other and feel that we are placing our patients in competent hands.

I would therefore ask those interested in pneumothorax work, and in the idea of forming an association, to communicate with me.

H. Schwatt, M.D., Edgewater, Colo.
Superintendent, Sanatorium of the Jewish Consumptives' Relief Society.

Cooperatively Conducted Local Hospitals

To the Editor:—I have learned that in a number of localities the physicians of small country towns have joined together and conducted a successful hospital for the community. Please give me plans or methods of undertaking the establishment of a hospital of the kind in a county seat town of about 2,000 inhabitants, by-laws governing the physicians interested, etc. Please give me the addresses of physicians who have adopted such methods of work and all the information you can to get a movement of this kind started in our community.

M. P. O.

[Comment.—We shall be glad to receive information regarding the proposition, either for publication or to be forwarded to the writer of the letter.—Ed.]

Queries and Minor Notes

Anonymous Communications and queries on postal cards will not be noticed. Every letter must contain the writer's name and address, but these will be omitted, on request.

TOOTH DETERGENTS

To the Editor:—Has The Journal published any report on the detergent and antiseptic effects of the various preparations advertised for cleansing the teeth? If not, would it not be well in the interest of many readers who must wish accurate information on the selection of an effective agent to have the Council examine and report on this question? S. T. A.

Answer.—The Journal has published recently in the Department of Therapeutics (Nov. 8 and 15, 1913, pp. 1719 and 1812) an article on oral cleanliness which discusses the principles involved in the use of tooth-powders and other preparations for cleansing the teeth. One of the constituents of many tooth-powders is soap, and this ought to be a harmless substance except for the objection to its alkalinity. The reason for employing an alkaline substance seems to be that it is recognized that dental decay is due to the effect of acids formed by fermentation. These acids, however, do not accumulate on the teeth in the free state but unite with the lime-salts of the enamel or dentine as soon as they are formed. The alkalinity of the ordinary tooth-powder can be of little service because its occasional application can do nothing to check the action of acids which are continuously formed during the intervals. Moreover, the use of an alkaline application to the teeth may be a positive detriment by depressing the secretion and alkalinity of the saliva on the principle that a secretion which is no longer needed ceases to be formed. Pickerill ("Stomatology in General Practice," p. 100) has shown that alkalies applied to the teeth and gums reduce both the amount and alkalinity of the saliva secreted subsequently to the application of the alkali, while the reverse effect is produced by acids. Hence he recommends a weakly acid application rather than the alkali. Another reason for the use of acid has been advanced by W. J. Gies (*Household Arts Review*, May, 1913, p. 12; The Journal, Nov. 8, 1913, p. 1719), who found that alkaline applications did not readily dissolve the mucus which retained the fermenting food on the teeth and hence were not efficient cleansers. He also advocates the substitution of acid solutions. Pickerill has found that daily rubbing the teeth with a weak solution of tartaric acid did not remove any appreciable amount of the material of the tooth. It seems, therefore, that tooth detergents should be made of weak acids rather than weak alkalies.

An antiseptic is usually added to these preparations with a view to hindering the proliferation of the numerous microorganisms which are found in the mouth or introduced with the food. It is time that physicians should have clear ideas as to what can be expected from antiseptics applied to the oral cavity. To disinfect the mouth would be a difficult matter, and in practice is not worth attempting, unless by the direct work of a skilful operator. To give the patient an antiseptic with which to treat the mouth is worse than useless. If the object is to prevent putrefaction or fermentation it is much simpler to remove mechanically the fermentable material than to attempt to preserve it with an antiseptic. Pickerill suggests that not only is an antiseptic which is in contact with the organisms not more than three minutes a day of no use, but not improbably it has the reverse effect—that of producing a more vigorous and resisting strain of organisms due to the *slight* and *intermittent* opposition to their growth and to the survival of the fittest. This author states that for a chronic and slowly progressing lesion like caries of the teeth, the intermittent use of antiseptics is of no value. Their use should be limited to acute conditions and then they should be used frequently and in full strength, that is, as strong as can be tolerated, with the object of rapidly reducing the number and virulence of the organisms.

OPERATING-ROOM SLUMBER SONGS

To the Editor:—In your issue of June 6, I read with interest Dr. Kane's account of his musical operating-room. No doubt it is an admirable way of assisting the anesthetist, although I can imagine some of the disadvantages. For example, a patient given to dancing might become uncontrollable on hearing the "Argentine Tango," and then, again, the surgical nurse might be the cause of complications were one to play the "Matrimonial Glide." But outside of these unforeseen accidents good results could no doubt be obtained.

As a historical note I would add that Dr. Kane is not a pioneer in this respect. Henri de Mondeville (1260-1320), a shining light in his time and possessed of a most delightful line of sarcasm, advocated the following:

"Keep up your patient's spirits by music of viols and ten-stringed psaltry, or by telling him that he has been elected to a bishopric if a church man, or by forged letters telling him of the death of his enemies."

R. W. Mendelson, M.D., Des Moines, Iowa.

Answer.—Apropos of this we quote the following suggestions from B. L. T.'s Line-O'-Type Department of the Chicago *Tribune:*

SELECT YOUR RECORD [June 8]

"I owe to Dr. Burdick, our anesthetist, thanks for his selection of records admirably adapted to the tastes and temperament of the subjects."—Evan O'Neil Kane, M.D., Kane, Pa.

This opens up a new avenue of fancy. When you are laid on the table and the saw is called for, what would be your choice of phonograph records? M. F. votes for "This is the Life."

THE ANESTHESIEST WAY [June 10]

Select your phonograph record before you go "under the knife."
Chick: "You can put me down for 'Good-Bye, Everybody.'"
L. C. W.: "'If You Talk in Your Sleep, Don't Mention My Name.'"

THE ANESTHESIEST WAY [June 12]

When I am on the table
And the surgeon's saw I see,
Let the intern start the record,
"What Will the Harvest Be?"

—Martha.

Eandy: "Just Tell Them that You Saw Me."
F. R.: "Please Go 'Way and Let Me Sleep."
W. M. B.: "Any hymn found in the appendix—to be followed by a collection."

THE ANESTHESIEST WAY [June 15]

C. E. B.: Turn on the record, "How happy could I be with Ether were t'other dear charmer away."
P. B. D.: "I Don't Know where I'm Going, But I'm on My Way."
F. G. F.: "Good Night, Nurse."
M. L. P.: "She Sleeps in the Deep."

THE ANESTHESIEST WAY [June 20]

Prize record, besought by H. M.: "Let a little sunshine in."

ARTICLES ON INTESTINAL OBSTRUCTION DUE TO WORMS

To the Editor:—Kindly refer me to any literature on the subject of ascariasis.

H. Rosenstein, M.D., Chicago.

Answer.—The following is a list of articles on the subject:

Van Meter, B. F.: Intestinal Obstruction Due to Roundworms, *Surg. Gynec. and Obst.*, April, 1909.
Venning, R. E.: Intestinal Obstruction from Ascarides Lumbricoides, The Journal, June 18, 1910, p. 2041.
Whelan, Charles: Intestinal Obstruction Due to Ascarides Lumbricoides, with Autopsy, The Journal, Oct. 22, 1910, p. 1442.
Roll, J.: Oxyuris as a Cause of Ileus, *Norsk. Mag. f. Laegevidensk.*, 1910, lxxii, No. 1.

Burn, V.: Helminths Complicating Operations on Children, *Policlinico*, Rome, Oct. 6, 1912, p. 1481; abstr., THE JOURNAL, Nov. 9, 1912, p. 1757.

Braun, M.: Animal Parasites of Man, New York, William Wood & Co., 1906, $5.

Doflein, F.: Lehrbuch der Protozoenkunde, Ed. 3, Jena, Fischer, 1911.

Mense, C.: Handbuch der Tropenkrankheiten, Ed. 2, Leipsic, Barth, 1913. (D. A. Looss contributes a large part of this.)

Fertig, J.: Incision of Common Bile-Duct for Obstruction by Ascarides, *Deutsch. Ztschr. f. Chir.*, April, 1912; abstr., THE JOURNAL, June 1, 1912, p. 1729.

Rosenthal, R.: Ascaridiasis of the Bile-Passages Simulating Cholelithiasis in the Elderly, *Deutsch. Ztschr. f. Chir.*, March, 1913.

Allen, M. D.: Ascaris Lumbricoides as a Complication of Surgical Operation, THE JOURNAL, June 21, 1913, p. 1953.

Echeverria, E.: Remarkable Resistance to Combined Ascaris and Hookworm Infection, *New York Med. Jour.*, Feb. 24, 1912.

Fraser, T. A.: Intestinal Parasites, *Kentucky Med. Jour.*, Nov. 1, 1913.

Row, T. G. S.: Roundworms and Pregnancy, *Indian Med. Gaz.*, October, 1913.

Lechler, A. and Plew, H.: Ascarides in Children, *Arch. f. Kinderheilk.*, 1913, lxii, Nos. 1 and 2.

Pflugradt, R.: Ascarides in the Bile-Passages, *Deutsch. med. Wchnschr.*, Jan. 29, 1914.

PUBLICATIONS ON CHRISTIAN SCIENCE

To the Editor:—I am writing for information on Christian Science. If you have something on that subject I would appreciate your sending it to me, or putting me in touch with some one from whom I can secure an article concerning it.

C. D. DIXON, M.D., Dixon, Ill.

ANSWER.—The following is a list of recent publications on this subject:

Peabody, F. W.: Religio-Medical Masquerade, Boston, Hancock Press, 1910.

Paget, Stephen: Faiths and Works of Christian Science, New York, the MacMillan Company, 1909.

Books on Christian Science, Queries and Minor Notes, THE JOURNAL, Aug. 29, 1908, p. 778. This contains a list of books and articles.

Faith Without Works, Current Comment, THE JOURNAL, Oct. 11, 1913, p. 1383.

Chapin, H. D.: Christian Science in Operation, *Med. Rec.*, New York, Dec. 16, 1911.

Christian Science and the Sex Problem, *Outlook*, Sept. 13, 1913.

MacCulloch, C.: Concerning Christian Science, *Independent*, Aug. 28, 1913.

Knott, J.: Christian Science, *St. Paul Med. Jour.*, April, 1911.

Stevens, B. N.: Failure of Christian Science to Differentiate Dropsy and Pregnancy, THE JOURNAL, Dec. 21, 1912, p. 2274.

Mrs. Eddy and the National League for Medical Freedom, Current Comment, THE JOURNAL, Feb. 24, 1912, p. 559.

Senator Works and the Los Angeles County Society, Current Comment, THE JOURNAL, Dec. 2, 1911, p. 1843.

DISTINCTION BETWEEN "TUBERCULOUS" AND "TUBERCULAR"

To the Editor:—Will you kindly inform me concerning the proper distinction between the terms "tuberculous" and "tubercular"?

SANFORD B. HOOKER, M.D., Boston.

ANSWER.—Careful writers apply the term "tubercular" to lesions characterized by the presence of nodes or tubercles, whether caused by the tubercle bacillus or by any other agent; and "tuberculous" to lesions produced by the *Bacillus tuberculosis* or to conditions associated in one degree or another with tuberculosis. That is to say, the word "tubercular" applies to the external form of a lesion; the word "tuberculous," to the cause, actual or possible, of a lesion or a condition. Thus, tubercular leprosy, caused by the *Bacillus leprae*, is so called because of the nodular character of the lesions, while tuberculous pleurisy is so called because produced by the tubercle bacillus. A "tuberculous diathesis" is a predisposition toward tuberculosis; the tubercle bacillus, whether capable of being demonstrated or not, is regarded as a factor, potential or operative, in the condition.

Sanitary Environment in Places of Employment.—The sanitary conditions of the places of employment have a distinct and direct bearing in the causation of disease through poor general conditions, poor lighting, heating and ventilation, overcrowding, excessive humidity and special conditions of deleterious gases, fumes, dust, poisons and the like. These conditions are so obviously causing disease and are so prevalent in so many industries and causing so much direct injury to the workers that the general public have come to consider these as the full extent of the damages for which industrial conditions are responsible.—B. S. Warren in *Pub. Health Rep.*

Medical Education and State Boards of Registration

COMING EXAMINATIONS

ALABAMA: Montgomery, July 14. Chairman, Dr. W. H. Sanders, Montgomery.

ALASKA: Juneau, July 7. Sec., Dr. Henry C. De Vighne, Juneau.

ARIZONA: Phoenix, July 7-8. Sec., Dr. John Wix Thomas, Phoenix.

COLORADO: Denver, July 7. Sec., Dr. David A. Strickler, 612 Empire Bldg., Denver.

CONNECTICUT: New Haven, July 14-15. Sec., Dr. Chas. A. Tuttle, New Haven. Homeopathic: New Haven, July 14. Sec., Dr. Edwin C. M. Hall, New Haven. Eclectic: New Haven, July 14. Sec., Dr. T. S. Hodge, 19 Main St., Torrington.

INDIANA: Indianapolis, July 14-16. Sec., Dr. W. T. Gott, State House, Indianapolis.

MAINE: Augusta, July 7-8. Sec., Dr. Frank W. Searle, 776 Congress St., Portland.

MASSACHUSETTS: Boston, July 14-16. Sec., Dr. Walter P. Bowers, Room 159 State House, Boston.

NEW MEXICO: Santa Fe, July 13. Sec., Dr. W. E. Kaser, East Las Vegas.

NORTH DAKOTA: Grand Forks, July 7. Sec., Dr. G. M. Williamson, Grand Forks.

OKLAHOMA: Oklahoma City, July 14. Sec., Dr. John W. Duke, Guthrie.

OREGON: Portland, July 7-9. Sec., Dr. L. H. Hamilton, Medical Bldg., Portland.

SOUTH DAKOTA: Deadwood, July 14. Sec., Dr. P. B. Jenkins, Wauhay.

UTAH: Salt Lake City, July 6-7. Sec., G. F. Harding, 405 Templeton Bldg., Salt Lake City.

VERMONT: Burlington, July 14-17. Sec., Dr. W. Scott Nay, Underhill.

WASHINGTON: Seattle, July 7. Sec., Dr. C. N. Suttner, Baker Bldg., Walla Walla.

WYOMING: Laramie, July 9-11. Sec., Dr. H. E. McCollum, Laramie.

Teaching Fellowships in Medicine

The University of Minnesota Medical School has adopted the principle of teaching fellowships in the clinical departments, with the end in view of providing well-trained full-time assistants and research workers and at the same time giving a basis for graduate instruction in the various specialties. It is arranged that the fellowships be in three grades, namely, first year, $500; second year, $750, and third year, $1,000.

To be eligible to a first-year fellowship, a candidate, as a general rule, must have received his M.D. degree from an acceptable school and have served one year as intern in a good hospital. The fellows appointed under this system will give their entire time to study, research and such assisting in clinics as they may be prepared for. A course of study will be laid out for each fellow, adapted to prepare him for the specialty chosen by him. This course will include work in the laboratory branches, dispensary service, hospital service and investigation. It is probable that the course (of two or three years) will lead to a degree properly recognizing the specialty in which the candidate has worked. Arrangements may be made whereby these fellows can spend one year at the Mayo Clinic and count the same toward the advanced degree.

In order to inaugurate the system the Board of Regents of the university has authorized the following teaching fellowships for the next school year: one each in medicine, in surgery, in obstetrics and gynecology, and in eye, ear, nose and throat work, each of $500. There is also provision for one $500 fellowship and one $1,000 fellowship in mental and nervous diseases, or in lieu of these a $1,500 instructorship.

District of Columbia Reports

Dr. George C. Ober, secretary of the Board of Medical Supervisors of the District of Columbia, reports the oral and written examination held at Washington, April 8-10, 1913. The number of subjects examined in was 8; total number of questions asked, 80; percentage required to pass, 75. The total number of candidates examined was 10, of whom 8 passed and 2 failed. The following colleges were represented:

College	PASSED Year Grad.	Per Cent.
Georgetown University	(1911)	90
George Washington University	(1911)	91.6
Howard University	(1912)	80.6, 83.8

Columbia University, College of P. and S.	(1905)	85.1
Temple University	(1910)	81.3
Women's Medical College of Pennsylvania	(1910)	82.9, 87.4

FAILED

Maryland Medical College	(1912)	71.4
College of Physicians and Surgeons, Boston	(1910)	73.2

At the examination held July 8-10, 1913, the total number of candidates examined was 24, of whom 20 passed, 2 failed and 2 were refused license. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University (1902) 83; (1912) 79.6; (1913) 91.5, 96.4.	(1913)	81.1, 82.1,
George Washington University	(1912) 85.4; (1913)	88.3, 89.7, 93
Howard University	(1913)	80.1
Bennett Medical College	(1913)	81
Hering Medical College	(1906)	77.1
University of Maryland	(1912)	81
College of Physicians and Surgeons, Boston	(1910)	75.8
New York Homeo. Medical College and Hospital	(1913)	78.4, 83.1
University of Pennsylvania	(1907) 84.8; (1913)	81.7
Vanderbilt University	(1912)	88.6

FAILED

Maryland Medical College	(1913)	69.2, 74.9

At the examination held Oct. 14-16, 1913, the total number of candidates examined was 13, of whom 12 passed and 1 failed. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University	(1912)	84.4, 86.2
George Washington University	(1912) 78.4; (1913)	86.6
Howard University	(1911) 91.7; (1912) 79.4; (1913)	76.1
Johns Hopkins University	(1912) 81.9; (1913)	90.8
Maryland Medical College	(1913)	75.8, 75.8
University of Maryland	(1912)	75.4

FAILED

Maryland Medical College	(1911)	67.2

Five candidates were licensed through reciprocity from July 12 to Nov. 18, 1913. The following colleges were represented:

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
Howard University	(1909)	Texas
Baltimore Medical College	(1907)	Louisiana
College of P. and S., Baltimore	(1906)	W. Virginia
University of Missouri	(1887)	N. Carolina
Jefferson Medical College	(1897)	W. Virginia

Oklahoma January Report

Dr. J. W. Duke, secretary of the Oklahoma State Board of Medical Examiners, reports the written examination held at Oklahoma City, Jan. 13-15, 1914. The number of subjects examined in was 10; total number of questions asked, 100; percentage required to pass, 70. The total number of candidates examined was 8, of whom 5 passed and 3 failed. Twelve candidates, including 1 osteopath, were licensed through reciprocity. The following colleges were represented:

PASSED

College	Year Grad.	Per Cent.
Georgetown University	(1912)	87
George Washington University	(1912)	87
Bennett Medical College	(1913)	82
College of Physicians and Surgeons, Baltimore	(1887)	75
St. Louis University	(1913)	83

FAILED

College of Physicians and Surgeons, Little Rock	(1910)	64
University of Arkansas	(1911)	70
Vanderbilt University	(1893)	65

LICENSED THROUGH RECIPROCITY

College	Year Grad.	Reciprocity with
University of Arkansas	(1909)	Arkansas
Howard University	(1912)	W. Virginia
University of Georgia	(1908)	Georgia
Central College of Physicians and Surgeons	(1904)	Indiana
State University of Iowa, Coll. of Homeo. Med.	(1900)	New Mexico
Eclectic Medical University, Kansas City	(1911)	Arkansas
Epworth College of Medicine	(1910)	Arkansas
Chattanooga Medical College	(1910)	Tennessee
Memphis Hospital Medical College	(1909)	Mississippi
University of the South	(1906)	Mississippi
Vanderbilt University	(1886)	Texas

ANATOMY

1. What passes through the foramen magnum? 2. Give origin and insertion of sartorius muscle. 3. Name the parts severed in amputation of the lower third of the thigh. 4. Name the organs in the thoracic cavity. 5. Locate and describe the popliteal space. 6. How long is the alimentary canal in the adult? 7. Locate and describe the atlas. 8. Give origin of the gastric artery. 9. How many different bones in the body? 10. Give articulations of the humerus.

BACTERIOLOGY AND PATHOLOGY

1. Name four modes by which disease is extended, and the process of extension. 2. Define necrosis. Give four causes for same. Illustrate each. 3. What is fatty degeneration? Name three causes for same. 4. What do you understand by pathologic pigmentation? Give three methods by which the same is derived. 5. Define degenerative, exudative and proliferative inflammation. 6. Name three ways by which connective tissue may be derived. 7. Name three pathologic results which usually follow the softening of a thrombus. 8. What is tinea tonsurans and its effect on the body? 9. In a suspected tuberculous brain, name the parts you would first examine. Why? 10. Give the pathologic change that takes place in the blood of pellagra patients.

PHYSICAL DIAGNOSIS

1. What are râles? 2. Name the varieties of râles usually met with. 3. What do pulsations at the base and border of the heart indicate? 4. What is a murmur? 5. How are murmurs best heard and timed? 6. Name the physical signs of the lung cavity. 7. Name the methods of auscultation. 8. Diagnose aortic aneurysm. 9. Differentiate aortic aneurysm from tumors. 10. Diagnose first, second and third stages of lobar pneumonia.

TOXICOLOGY AND MEDICAL JURISPRUDENCE

1. What are the symptoms of acute poisoning from arsenic? Give antidote. 2. The body of a new-born baby found dead. How could it be determined whether the child had been born alive or not? 3. What are the symptoms of acute poisoning from bichlorid of mercury? Give the antidote. 4. What are the symptoms of acute poisoning from antimony? Give the antidote. 5. What is the maximum dose of morphin sulphate? 6. What is the maximum dose of strychnin sulphate? 7. Give some of the symptoms of traumatic hysteria. 8. Give a definition of melancholia; mania; katatonia. 9. Define criminal malpractice. Civil malpractice. 10. If a person should be improperly committed to an insane asylum what legal procedure would be necessary to secure his release?

OBSTETRICS AND HYGIENE

1. (*a*) What is the pelvis? (*b*) False pelvis? (*c*) True pelvis? 2. What are the straits of the pelvis? Give diameters of each. 3. (*a*) What is the liquor amnii? (*b*) How is it useful and what are the dangers of scanty liquor amnii? 4. (*a*) State the probable cause of face presentation. (*b*) How would you manage a case? 5. What are the dangers of feeble uterine contractions in the different stages of labor? Give your treatment in each stage. 6. Give two causes for post-partum hemorrhage and describe your treatment in each case. 7. (*a*) Name three diseases of the mother in which you would not allow the child to nurse the breast. (*b*) What is Colles' law? 8. At what temperature should a schoolroom be kept? 9. How would you examine a child to determine its physical fitness to enter public school? 10. (*a*) How would you ventilate a sick-room in pneumonia? (*b*) Would you advise a different temperature of the sick-room for a patient with pneumonia and one with typhoid?

MATERIA MEDICA AND PRACTICE

1. What is cresol? Salol? Give uses and action. 2. Give therapeutics of water, hot and cold. 3. Compare the physiologic action of aconite and digitalis. 4. Give etiology and diagnosis of cholelithiasis. 5. Diagnose and treat acute appendicitis. 6. Define cretinism. Give treatment. 7. How do tinctures differ from spirits? Give example of each. 8. Name the principal potassium salts and give use of each. 9. What is the difference between irritants and counterirritants? 10. What diseases most commonly occur in the right inguinal region?

GYNECOLOGY

1. Describe a normal menstruation and state the changes that take place in the uterine mucous membrane. 2. From what must you differentiate an ovarian cyst? 3. Treat pruritus vulvae. 4. What are the causes of pelvic abscess? Outline treatment. 5. Diagnose cancer of cervix. 6. Define pyosalpinx. Endometritis. Vaginismus. Cystocele. 7. Give the causes and treatment of non-specific vaginitis. 8. Give the causes of sterility. 9. Give the causes of metrorrhagia. 10. Treat ulcer of cervix.

PHYSIOLOGY

1. Give origin, distribution and function of phrenic nerve. 2. Give origin of the brachial plexus, and give the origin and function of the median nerve. 3. What agents of digestion change starch into sugar? 4. Locate crypts of Lieberkuhn and tell their function. 5. Define digestion. 6. What is the function of the clitoris? 7. What is the function of the white corpuscles of the blood? 8. Give origin, length and termination of cystic duct. 9. What nerve arises in the floor of aqueduct of Sylvius, is motor in function and supplies all the muscles of the eye except external rectus, superior oblique and orbicularis palpebrarum? 10. Tell where the enlargements of the spinal cord are found and what causes them.

SURGERY

1. What is a dislocation? Define the various kinds of dislocations. 2. What are the complications of dislocation of the hip? 3. Mention the causes of delayed union and give the treatment. 4. In what portion of the base of the skull may fractures lead to the escape of cerebrospinal

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fluid? 5. Give the cause, symptoms and treatment of chilblain. 6. What is harelip? 7. How are foreign bodies to be removed from the trachea? 8. Give the technic of a gastro-enterostomy—any one method. 9. Give the treatment of stone in the common duct. 10. What conditions of the kidneys require nephrectomy?

CHEMISTRY

1. What is an element? Name an element that is univalent, bivalent, trivalent and quadrivalent. 2. Give the chemical antidote to silver nitrate; also strychnin poisoning. 3. What is the chemical name and formula for iodoform? 4. What is albumin, and give test for albumin in urine. 5. What is the difference between an atom and molecule? Name the lightest element; the heaviest element; the most precious element. 6. What is allotropism? Amorphism? Endosmosis? 7. Give the characteristics of (*a*) nephritic urine, (*b*) cystitic urine. 8. Complete the equation, $2NaNO_3+H_2SO_4=$? 9. Name the chemical changes in the body after death (not physical). 10. What organic acids are present in vegetables and fruits?

Book Notices

CHEMICAL PATHOLOGY; BEING A DISCUSSION OF GENERAL PATHOLOGY FROM THE STANDPOINT OF THE CHEMICAL PROCESSES INVOLVED. By H. Gideon Wells, Ph.D., M.D., Professor of Pathology in the University of Chicago. Second Edition. Cloth. Price, $3.25 net. Pp. 616. Philadelphia: W. B. Saunders Company, 1914.

When the author wrote this pioneer work on chemical pathology he performed a most timely service. He marshaled from widely scattered sources the existing information about the chemistry of pathologic processes and presented it in an orderly and attractive form. The result no doubt greatly facilitated the study of chemical pathology at the opportune period when it was being realized that further progress in the understanding of pathologic processes had to come through chemical rather than morphologic methods of investigation. Since the first edition was issued (1907) the literature on chemical pathology has received more substantial contributions than in all the previous history of the science. Naturally the consequent changes in views and the added knowledge have necessitated many and radical alterations in the revised edition. This is especially the case in the parts dealing with immunity and the ductless glands. R. T. Woodyatt writes anew the chapter on carbohydrate metabolism and diabetes, subjects which he is especially well qualified to discuss. The book presents the existing state of knowledge with masterly thoroughness, discrimination and clearness. It is a product of genuine scholarship. The reception on its first appearance was uniformly favorable; it quickly became accepted as a reliable and authoritative source of information in regard to its subject and as a useful guide to further study, not only for the student and physician, but also for the investigator in biologic chemistry. The revised edition will enjoy this enviable distinction in even larger measure.

GERIATRICS: THE DISEASES OF OLD AGE AND THEIR TREATMENT, Including Physiological Old Age, Home and Institutional Care and Medico-Legal Relations. By I. L. Nascher, M.D. Introduction by A. Jacobi, M.D. Cloth. Price, $5 net. Pp. 517, with 81 illustrations. Philadelphia: P. Blakiston's Son & Co., 1914.

The subject discussed in this book is nowhere defined except by antithesis. Old age is compared and contrasted with childhood, but the essential characters that mark off the senile organism are only vaguely outlined. Still Dr. Nascher insists that we cannot deal understandingly with senile diseases if we do not understand the senile organism, and that we cannot understand the senile organism unless we study it as a physiologic entity entirely apart from maturity. He then proceeds to show that "the irregularity in the order and the wide variations in time and extent of the senile changes in different individuals make it impossible to establish a norm or standard for these changes." What then becomes of the entity entirely apart from maturity?

The size of the book precludes an exhaustive analysis. There is much vague statement of hypotheses that produces a sense of confusion in the mind of the reader. For the most part, the diseases of old age are described like the same diseases occurring in middle life. A few sentences suffice to indicate the modifications due to age. As a result the book is burdened with matter which covers the entire field of medicine often given with necessarily insufficient detail, and available in other text-books. One subject Nascher discusses with considerable fulness, namely, the arteriosclerosis of old age. Several theories of the origin of this condition are given, and finally the experiments of Weil are referred to. The theory founded on these experiments is developed at considerable length, the reason given being that there "are favorable reports of a method of treatment based on this theory." (The method of treatment referred to is, we presume, the use of amorphous phosphorus). "Weil," Nascher reports, "found that while the normal daily elimination of CaO through the kidneys was 0.39 gm., in over 50 per cent. of his arteriosclerosis cases, the elimination was less than 0.2 gm. and in no case did it reach the normal, notwithstanding abundant lime introduction. The conclusion is that there is an excessive lime retention with consequent disproportion of salts in the blood. Lime deposits occur late in the disease and this theory does not explain the early degenerative process." No reference is given by Nascher to Weil's article. It may be noted here that the determination of an abnormally small excretion of calcium in the urine affords no ground for concluding that there is retention of calcium, because the greater part of ingested calcium is excreted by the intestine. In representing the character of the old the author is inclined to dwell on the darker lines of the picture and to portray the aged as examples of inconsiderate selfishness, forgetting the many examples of men and women working to advanced age in the interest of humanity, or waiting quietly and uncomplainingly for their discharge from their accomplished warfare. Notwithstanding these defects the author has included a good deal of important information which it may be worth while to extract by a patient reading of the whole book.

FLIES IN RELATION TO DISEASE. NON-BLOODSUCKING FLIES. By G. S. Graham-Smith, M.D., University Lecturer in Hygiene, Cambridge. Cambridge Public Health Series. Cloth. Price, $3.50. Pp. 292, with 32 illustrations. New York: G. P. Putnam's Sons, 1913.

This book is an excellent discussion of the mechanical conveyance of disease germs by non-bloodsucking flies. It is well written, beautifully illustrated, and deals with the subject in a thoroughly interesting fashion. A comprehensive bibliography is appended. One feature that will appeal to practical workers is the definite way in which the gaps in our knowledge are pointed out. The writer clearly shows the insufficiency of the evidence on which are based the extravagant claims made by some popular writers regarding the share of house-flies in spreading disease. The present position of our knowledge is summed up in the statement: "It is certain that the house-fly is a potential disease carrier and a constant frequenter and disseminator of filth, but much remains to be done before Howard's name 'typhoid fly' . . . can be completely justified." Again: "The general evidence relating to the spread of typhoid fever by flies in cities in temperate climates is at present far from conclusive." A few misprints of proper names are noticed, as on page 75, "Glossona" and on page 135, Kartle (for Kastle) and Leunoden (for Lumsden), but in general the proof-reading seems to have been carefully done. Altogether the book launches the new Cambridge Public Health Series most successfully.

A REFERENCE HANDBOOK OF THE MEDICAL SCIENCES, EMBRACING THE ENTIRE RANGE OF SCIENTIFIC AND PRACTICAL MEDICINE AND ALLIED SCIENCE. By Various Authors. Third Edition. Edited by Thomas Lathrop Stedman, A.M., M.D. Volume 3. Cloth. Price $7 net. Pp. 930 with 665 illustrations. New York: William Wood & Co., 1914.

A striking feature of the present volume is the number of short articles. With the exception of articles relating to the ear, which aggregate nearly one hundred pages, the articles on important subjects seldom exceed fifteen pages, many such as that on diabetes mellitus, not reaching ten pages. Though short, the articles are excellent. The illustrations are plentiful, some of them being colored plates.

Medicolegal

Valid Regulations of the Sale of Milk

(Kay vs. City of Chicago et al. (Ill.), 104 N. E. R. 1104)

The Supreme Court of Illinois affirms a decree dismissing for want of equity a bill filed by the plaintiff to restrain the city of Chicago and its officers from revoking licenses issued to him as a milk-dealer, and from interfering with the distribution of milk products by him, and others similarly situated, for failure to comply with certain provisions of an ordinance of the city. The court says that the plaintiff did not question the power of the city to require the pasteurization of milk, but only the reasonableness of requiring the use of the temperature-recording apparatus mentioned in the ordinance. He alleged that he was furnishing clean, pure, and properly pasteurized milk, and that the requirements of the ordinance were no more reasonable than would be a requirement that he should furnish equipment for the city laboratory or pay an inspector for ascertaining whether he was complying with the ordinance. But the court cannot say that the requirements complained of in the ordinance are not adapted to the object sought or are not reasonable.

The regulation of the sale of milk and its products is essential to the preservation of the public health, and authority for its regulation is clearly given to the city council by paragraphs 50, 53, 66 and 78 of Section 1 of Article 5 of the cities and villages act of Illinois. The object of the ordinance is not to benefit persons engaged in the milk business or to enable them to comply with the ordinance in regard to pasteurizing milk, but is to make sure that the milk offered for sale within the city shall be of a quality which will not be detrimental to the public health. The city having power to require milk to be pasteurized is not limited to the imposition of a penalty for a violation of this requirement, but may prescribe the conditions under which the pasteurization shall be done in order to prevent an evasion of the ordinance and insure that the product shall be such as the ordinance requires.

There is no article of food in more general use than milk; none whose impurity or unwholesomeness may more quickly, more widely, and more seriously affect the health of those who use it. The regulation of its sale is an imperative duty which has been universally recognized. This regulation in minute detail is essential, and extends from the health and keeping of the cows which produce the milk, through all the processes of transportation, preservation, and delivery to the consumer. Not only may laws and ordinances require that milk offered for sale shall be pure, wholesome and free from the bacilli of any disease, but they may and do, in order to produce this result, prescribe the manner in which such purity, wholesomeness, and freedom from disease shall be secured and made to appear. The cows may be required to be registered with a designated public authority; the dairies to be conducted and managed according to prescribed regulations, and, together with the dairy utensils, subjected to inspection; the receptacles in which milk is contained to be of prescribed character and capacity; the labels to be placed according to fixed regulations, and to contain certain required information; the milk to be prepared in the manner, at the times, and by the means directed, and at all times to be subject to inspection. These may be drastic restrictions on a private business; but experience and the increasing knowledge of the causes of disease and the agencies of its propagation have demonstrated the necessity of such restrictions to the preservation of the public health. The object of all such restrictions is the preservation of the public health, and as a means to that end the protection of the general public against dishonest vendors of milk. They all impose inconveniences and expense on the dealers in milk, but they are not on that account unreasonable, unjust or oppressive. Legislatures and city councils, in the exercise of the police power, may prohibit all things hurtful to the health and safety of society even though the prohibition invade the right of liberty of property of an individual.

If the apparatus required should not record the temperature accurately at all times or should not indicate the length of time the temperature was maintained, or if it can be manipulated so as not to show an accurate record, these are matters for the city council to consider. Courts cannot overrule the determination by the city council that a particular method of protecting the public should be adopted unless it is so clearly and manifestly wrong that there can be no doubt about it. A personal inspection of all milk sold in the city would be manifestly a requirement difficult, if not impossible, to carry out. Even though the recording apparatus may be manipulated by a dishonest dealer so as to show an untrue record, the city council may have thought its use better for the protection of the public than a system by which no record was preserved, but the health officers were compelled to rely wholly on the dealer, and the court cannot say that they were clearly and unmistakably wrong. Whether officers of the health department shall be provided in sufficient number to visit the places where pasteurization takes place between each pasteurization and the next is also a question for the council.

No Charter for Chiropractors' Association

(Appeal of Chiropractors' Association of Pennsylvania (Pa.), 90 Atl. R. 335)

The Supreme Court of Pennsylvania affirms an order refusing an application for a charter for a chiropractors' association. The court declares that it cannot say that the court below was wrong in its conclusion that approval of this application ought to be withheld until the incorporators have attained a legal status under the laws of the commonwealth governing all medical practitioners. After examining the application and considering the testimony taken before a commissioner in support thereof, the court below was unable to approve of the grant of the charter. Several reasons were given. First, it appeared from the report of the commissioner and from the petition that the applicants as "chiropractors" had no legal status under the law of Pennsylvania, and that the main object in procuring the present charter was to give the association a legal status, prior to that which they would endeavor to obtain under the law of the state. This fact of itself, the court said, was a sufficient reason for withholding approval of this charter until the status of the incorporators was recognized and defined by laws. Another reason assigned was the implied purpose of the proposed corporation to create subordinate organizations throughout the state of Pennsylvania subject to the central organization. This, the court felt, was beyond its authority to sanction. A third reason which influenced the court was its inability to ascertain what was meant in the application by the term "chiropractors," or what the real purpose was which was to be effected by the organization. The court said that examination of the testimony of the incorporators gave rise to considerable doubt as to which of the purposes of the act of assembly the incorporators might be chartered under. Its exact position seemed to be doubtful in the minds of the incorporators themselves. One answer seemed to indicate that they were engaged in general practice in the treatment of almost every known disease, which would bring them within the requirements of the laws of the state regulating medical practice.

Reference Changed

The opinion of the Supreme Court of Colorado in the case of *Graeb* vs. *State Board of Medical Examiners et al.* appeared first in the advance sheets of 135 Pacific Reporter, 776. This was given as the legal reference in the Medicolegal Department of THE JOURNAL (Jan. 31, 1914, p. 402). For some unexplained reason, however, the decision was omitted from the bound volume of 135 Pacific Reporter, and now appears in the advance sheets of 139 Pacific Reporter, p. 1099. It has to do with the validity of a statute providing for the revocation of licenses of physicians obtaining fees on representations that manifestly incurable diseases can be permanently cured.

Society Proceedings

COMING MEETING

Montana State Medical Association, Lewistown, July 8-9.

AMERICAN PEDIATRIC SOCIETY

Twenty-Sixth Annual Meeting, held in Stockbridge, Mass., May 26-28, 1914

(*Continued from page 2050*)

The High Caloric Diet in Typhoid of Infants and Young Children

DR. L. E. LAFETRA and DR. LOUIS C. SCHROEDER, New York: Our series comprises 48 cases. The children were fed at intervals of three hours, beginning at 6 a. m. and continuing until 9 p. m. The articles given were very much those prescribed for the child in health, with the exception that the only meat used was creamed chicken. In no case was an exclusive milk diet used. Every patient took cereal in some form. Eggs and toast were offered from the beginning. The number of calories that were actually taken after the first few days and that seemed from a clinical standpoint to have been utilized satisfactorily varied from 100 to 3,000 per kilo of body weight. The urine in these cases seldom showed any traces of indican. It was found that a high range of temperature interfered somewhat with the taking of so much food. The so-called typhoid state occurred in a much smaller proportion of the cases than under the older method of treatment. Abdominal distention was present in only six cases and in only one was it troublesome. Five of the patients had blood in the stools at some time during the course of the disease. In only two instances were the hemorrhages severe enough to cause apprehension. One patient was transfused three times and lost in weight, but during convalescence took the largest amount of food recorded, viz., 8,000 calories in twenty-four hours. There were but three relapses and one recrudescence. During the course of the fever 60 per cent. of the patients gained weight.

DISCUSSION

DR. FRANK S. CHURCHILL, Chicago: Do you think there was any connection between the hemorrhages and the high caloric diet?

DR. CHARLES GILMORE KERLEY, New York: After having had typhoid myself I felt that patients should have a more generous diet and have been following out this plan for several years. The diet I have given is similar to that just advocated, but I have not been allowing meat until the third week. We find much less tympanites after getting away from the milk diet.

DR. JOHN LOVETT MORSE, Boston: I also had typhoid and learned my lesson. With the more liberal diet one does not get the constipated stools that one gets with a milk diet. We are feeding our typhoid patients on a varied diet and try to keep up the calories as high as Dr. LeFetra does. As it is difficult to give the high caloric diet during the febrile period, the feeding of typhoid cases should be divided into two periods, the febrile and the post febrile.

DR. L. E. LAFETRA, New York: As to the effect of the high caloric diet on hemorrhage, the diet was not very high in caloric value at the time of the hemorrhage. When the children are very sick they do not take so much food, but one can gradually work them up to the larger amounts.

The Caloric Value of the Diets of Sick Infants

DR. J. C. GITTINGS, Philadelphia: The caloric value of 125 infants' diets was calculated and compared with two standards—the number of calories required on the basis of the weight on admission to the hospital and the number of calories required by a normal child of the same age and the average height. The percentage of deficiency in caloric requirements based on weight on admission was reasonably small, but the small gain, one-fifth of an ounce a day, for all cases, two-fifths of an ounce for recoveries, suggests that it might have been possible to exceed the caloric minimum with benefit. The complicated atrophy cases showed about the same deficiency as the recoveries, but in the uncomplicated atrophies and in the miscellaneous groups the diet exceeded the minimum requirement and the gain was proportionately large. In the gastro-intestinal group a similar difference was noted, but the uncomplicated cases showed an actual deficiency instead of excess and received less food than careful attention to caloric requirements would have indicated. The tuberculous meningitis patients showed an actual gain in weight because of the forced feeding. The percentage of admission weight deficiency of all cases compared with that of the normal child of the same age was 32 per cent. The percentage of caloric deficiency was 36 per cent. Those cases which showed the greatest deficiency were babies under 3 months of age, and cases of infantile atrophy and gastro-intestinal disease complicated with vomiting, diarrhea or fever.

DISCUSSION

DR. CHARLES HUNTER DUNN, Boston: I have always felt the fallacy of the minimum caloric requirement. We have tabulated the caloric value of the diet taken by about all the infants in our wards and found that the extremes were so great that no conclusions could be drawn from any system of averages that could be of practical value.

DR. HENRY DWIGHT CHAPIN, New York: We have overestimated the value of the caloric method of feeding infants. It is the assimilation of nutrition and not the heat production that is of value. The elements in the food should be in proper proportion and are not interchangeable. In feeding infants we must provide for growth.

DR. ROWLAND G. FREEMAN, New York: Fat babies require less food than the poor marasmus ones.

DR. CHARLES GILMORE KERLEY, New York: Some children require more than the estimated standard. In older children the number of calories required is dependent on activity.

The Feeding of Malnourished Infants with High Proteins and Carbohydrates and Very Low Fat Values

DR. D. J. MILTON MILLER, Atlantic City, N. J.: The successful feeding of cases of malnutrition is by means of human breast-milk, and too much time is wasted in seeking substitutes before wet nursing is resorted to. A number of foods characterized by low fat and high protein and carbohydrate percentages have been tried, such as buttermilk, *Eiweissmilch*, Keller's malt food, etc., and all are applicable for a short period only. The series on which I made my observations belonged to the extremely atrophic and marasmatic class. Skimmed milk formed the basis of the diet with 1.0 to 1.75 per cent. fat. The children were not kept long on a fat-free diet, though the percentage of fat might always be below that of the normal formula. Eleven children were fed on this principle and the results were favorable.

The Results of Low Fats and High Proteids in Cases of Artificial Feeding in Infants

DR. PERCIVAL J. EATON and DR. EDWARD B. WOODS, Pittsburgh: We wish to present a series of cases showing what can be done for infants whose heredity is not of the best and whose environment has been bad. The patients were uniformly in poor condition. Certified milk and gravity cream alone were used. No formulas were pasteurized or sterilized. Dextri-maltose was used in each case and a proper quantity of citrate of soda, about 1 grain to each ounce of milk. When the children were first admitted they were put on barley water and then on defatted milk in small amounts. The milk was added in increasing proportions until a modified milk formula was used. The percentage of fat did not exceed 2.5 per cent. The most important point is that babies fed according to this general plan are less inclined to be ill and have a more stable life as well as very consistent growth.

(*Continued on page 131*)

COLLEGE OF PHYSICIANS OF PHILADELPHIA

Meeting held May 6, 1914, at 8 P. M.

The President, DR. JAMES C. WILSON, in the Chair

The Bureau of Child Hygiene of the Department of Health of New York City

DR. S. JOSEPHINE BAKER, New York: New York City was the first community to take cognizance of the importance of child welfare work. The Bureau of Child Hygiene was organized late in 1908 as a division of the Sanitary Bureau. The main work was the prevention of disease and the education of the public to do its share. All activities relating to the health of children were coordinated and placed under the bureau's control. The work at present starts with the prenatal care of the child, and intensive studies show a probability of a distinct lessening in infant mortality. The bureau has felt that the unsupervised, uneducated midwife, even at her best, is a distinct source of danger and should be subject to some definite control, and recommended to the board of health a resolution prohibiting any midwife who had not previously practiced from doing so after Jan. 1, 1914, unless she had received a diploma from a school for midwives recognized by the board of health.

Ophthalmia neonatorum has practically disappeared in New York City. Last year about 16,000 babies were under the care of our nurses with a mortality of 1.4 per cent. There are probably about 5,000 babies who at present are not properly cared for, and we hope within the next year to have such an equipment that no baby shall be neglected. Educational publicity has been widely used. Instruction of groups of girls over 12 in the care of babies has been one of the most valuable factors of the work. The point of attack has been the well baby, and our efforts have been directed to keeping the well baby healthy. To secure the fullest efficiency, effective cooperation has been obtained with all infant welfare organizations in the city. Since the organization of the Bureau of Child Hygiene, the death-rate of babies under 1 year of age has been reduced from 144 per thousand births in 1907 to 101.9 in 1913. Of the ten largest cities in the United States, New York ranks second in its low rate of infant mortality, being outdistanced only by St. Louis with its rate of 99.5. The bureau controls the matter of the foundling baby by supervision of homes in which these children are boarded out from the big foundling asylums.

The care of the child before school age is a most difficult problem. The day nurseries and orphan asylums of the city are under the control of the bureau. The main care of the child from 5 to 15 years falls within the work which is known as the medical inspection and examination of schoolchildren. Since the organization of the bureau it has not been necessary to close any public school in New York City because of an epidemic of contagious disease. Our methods are those of prevention with the exclusion from school of any child presenting premonitory symptoms of a contagious illness. In the most congested parts of New York it is difficult to discover cases of ringworm, scabies or impetigo. Trachoma has been reduced from 20 to 3 per cent. In 1909, 13.1 per cent. of the children examined had defective vision; in 1913 this was reduced to 8.5 per cent. The percentage of defective nasal breathing has decreased from 18.7 per cent. in 1909, to 8.9 per cent. in 1913. Adequate systems of ventilation have not yet been put into effect in the New York schools. This matter is under the control of the board of education. It is hoped that all schools will soon recognize the value of the open-window class.

The enforcement of that part of the child labor law relating to the issuance of employment certificates falls naturally as the last of the bureau's activities. The year previous to the organization of the bureau, but one child was refused an employment certificate because of physical inability. Last year, practically 600 were refused outright and nearly double that number had their applications held pending their obtaining the necessary care to secure good health. When we allow children to work we believe it is the duty of the community to see that they are physically able, and that their work may not react injuriously on them at the most important stage in their development. The bureau has 705 employees, including physicians and nurses. Its budget appropriation for 1913 was $652,000. It is the youngest and the largest bureau of the department of health. The results of its five years' work show that it is possible for any community to have a constructive program for the health of children, and that such a program to be effective must be founded on the idea of educational hygiene in preventive medicine.

Municipal Sanitation

MR. M. N. BAKER, president Board of Health, Montclair, N. J.: Broadly, municipal sanitation embraces all those works or activities which it is the duty of the city to conduct or regulate in the interest of public health. By a municipal program I mean not merely the planning of a city's activities for a single year but for many years to come, all with careful regard to the city's financial resources. Current practice in most American cities consists altogether too much in considering each division of municipal activity entirely by itself without regard to the other financial needs of the city. The result often is that the activity which has the most able orator, or whose administrative head has most political influence or backing, gets an undue share of the municipal funds, while other activities suffer accordingly. We must measure relative values in the field of public sanitation by vital statistics which, applied impartially and intelligently to the whole field, show that many lines of endeavor classed as sanitary must seek their justification chiefly from serving other than health protective functions.

When the promotion of public health is being considered, far greater weight should be given to water purification than to sewage treatment. While water purification purifies, sewage purification does not, so far as the removal of the germs of communicable disease is concerned. Sewage purification is a misnomer. A clear-cut distinction should be made between municipal health on the one hand, and municipal cleansing or some other form of decency or convenience on the other. In my opinion, the work of municipal boards of health should be confined almost wholly to direct measures for the control of communicable and perhaps occupational diseases, to the reduction of infant mortality extended to cover child hygiene, and to certain regulatory and educational work designed to promote general health. With a proper delimitation of the work of health departments so as to exclude all responsibility for the construction and operation of cleansing and other municipal work, which can best be entrusted to the engineer, and with the great improvements which have recently taken place in medical education, the medical rather than the engineering schools should be drawn on for the vast majority of health officers; but the medical schools are not yet equipped and probably never will be equipped to give, nor do medical students have time to take, all the instruction needed to make a good health officer. Fortunately, a number of schools of public health have been started during the past few years, which will meet in large measure the increasing demand for specific training to health officers.

DISCUSSION

DR. A. C. ABBOTT: I do not believe that those of us living in Philadelphia realize what it has meant for New York to accomplish the results that have been laid before us. In that city there is an area more densely populated than any other known spot on earth, and in twenty-six years there has been a reduction of mortality among children under 1 year of age of over 50 per cent. They are far ahead of us in New York on the matter of saving infant life. We are glad to be told that good health is purchasable. When one decides to purchase a thing or a condition, one must not have in mind the purchasing of all outdoors. One should contemplate that which can be paid for. Mr. Baker has clearly indicated this idea. The prevention of illness is the function of our health authorities and should come

first. The activities of our health boards in matters of general sanitation are diverting energies from the more important phase of health work. At the University of Pennsylvania, we have been offering instruction in public hygiene since 1906. Our effort is not to train specialists but to give the student a comprehensive understanding of the many-sided problem. It is significant of the spirit of the times that several other important educational institutions are also offering instruction in problems of public health. A health officer should have a medical training, because he is dependent on the professional men of the community for support, and he is much more apt to get it if he has had medical training, and is in sympathy with medical ideals. The man who has had, in addition to medical training, special instruction in public hygiene, is a much better health officer than he who has not.

SOUTH DAKOTA STATE MEDICAL ASSOCIATION

Thirty-Third Annual Session held at Watertown, May 26-28, 1914

The President, DR. F. A. SPAFFORD, Flandreau, in the Chair

Nervous Symptoms in Nephritis

DR. E. H. GROVE, Hetland: I saw a case of nephritis in which the prominent symptom was persistent uncontrollable vomiting without nausea. The vomiting was hysteric in type; when under close observation the patient was kept from vomiting; when in bed she did not vomit. Her general health and nutrition had remained good.

DISCUSSION

DR. T. J. BILLION, Sioux Falls: The vomiting in this case corresponds with cerebral or hysteric vomiting. I really think the well-preserved condition of the patient and the character of the vomiting are suggestive of hysteria. I have not been able to find any other condition that would cause the vomiting.

DR. HENRY L. ULRICH, Minneapolis: Nephritis means not only a change in the metabolism, but a chromatolysis of the nerve centers, sensory or motor. I do not think that in subacute nephritis the symptom of nausea is an absolute essential to cause vomiting. A patient can have vomiting without nausea. We are beginning to think that every acute nephritis is of infective origin. The kidney is not alone at fault; we must consider other organs, particularly the liver. Take the cases of hypertension, with slight evidences of nephritis: we cannot blame the kidney for the retention of toxic products alone. There must be some changes in the metabolism which cause the hypertension products and which, in turn, are causing the high blood-pressure. In regard to vomiting, we are dealing with a chromatolysis due to malnutrition of nerve-cells, and whether this malnutrition is due to liver metabolism, to stomach, intestinal lining, or digestive metabolism, we do not know.

DR. G. EUSTERMAN, Rochester, Minn.: In all cases of chronic intoxication we have a symptom-complex which runs more or less parallel with cases of hyperthyroidism. These symptoms may simulate the intoxication which is associated with Bright's disease. Very frequently patients present themselves with the symptoms characteristic of exophthalmic goiter. In other words, we are dealing with a chronic intoxication, with perhaps parenchymatous degeneration of the kidney and liver, which intoxication results in a similar train of symptoms. It is very important to be sure of excluding chronic Bright's disease in a certain percentage of these cases, and we have been surprised in making a careful examination of the twenty-four-hour specimen of urine and the condition of the blood and the blood-pressure and eye-grounds, to find we were not dealing with exophthalmic goiter, but with a chronic glomerular or interstitial nephritis.

DR. S. M. HOFF, Yankton: The more I study the subject of nephritis, the more I am convinced that the old theory of the etiology of the disease is not based on sound principles. Bright's disease means no more to me than a headache. I am convinced that the nephritides are due to some central nerve disturbance, because frequently the condition present in the kidney is one in which we find high blood-tension and cardiovascular disturbances. These are due not always to nutritional disturbances, but may be found in persons who are under constant high nerve-tension.

Afebrile Convulsions in Infancy and Early Childhood

DR. F. W. SCHULTZ, Minneapolis: The convulsions and similar manifestations develop on the basis of congenital neuropathic and psychopathic constitutions. Favorable conditions make them more manifest. These are, first, feeding. A breast-fed child is almost immune; only the artificially fed are very liable. Second, disorders of nutrition, quantitative (overfeeding), qualitative (one-sided feeding with milk or farinas, and acute intestinal disorders favor the development). Third, season of the year. The condition manifests itself particularly during the winter and spring months and abates or ceases altogether during the summer and fall months. Fourth, intercurrent febrile affections, like grip, pneumonia, etc., precipitate active manifestations. Fifth, the age of the child. From the third month up to the second year the condition is very common. Under eight weeks, spasmophilia can be ruled out. Spasmophilic convulsions can occur after the third year. We have, then, conditions similar to the tetany of adults. Sixth, hereditary and familial tendencies, which are predisposing factors. In this condition, as in epilepsy, teething and intestinal parasites have no bearing on either the cause or development of the disease. Spasmophilic convulsions consist of tonic contractions of the muscles of the face and extremities. They lead eventually to clonic convulsions.

The food for the spasmophilic child under 1 year should be breast-milk. Over 1 year the food for a long period should consist exclusively of carbohydrates. Cow's milk and a fat-rich food seem to have a specific unfavorable effect. It is well to exclude some of the meat, especially beef, from the diet. The brusque attack of convulsions is almost immediately controlled, certainly favorably influenced, by starvation, combined with a vigorous sedative, as, for example, chloral hydrate, 1 gm. by rectum, repeated at intervals, if necessary. Following this treatment, the child is placed on a strict, prolonged carbohydrate regimen combined with the phosphorus-cod-liver-oil therapy first advocated by Kassowitz. The use of calcium salts in this condition is of doubtful value. If any are used, calcium bromid should have the preference. If the dietetic regimen is carefully carried out, the child will be free for life from convulsions and most, if not all, the spasmophilic symptoms.

DISCUSSION

DR. J. M. FREEBERG, Watertown: Most of the convulsions that we see in these cases unquestionably come from infection or from an effect on the cortical cells of toxins in the system. If the case is of the fever type, the cause is most apt to be from the alimentary system.

DR. HENRY L. ULRICH, Minneapolis: At present it is held that asthma, hay-fever, pylorospasm and laryngospasm may be due to hypersensibility to proteins. In spasmophilics the conclusion is in favor of this being a hypersensibility reaction. It never occurs, as a rule, in breast-fed infants. Take the spasmophilic child off of cow's milk and the spasmophilia disappears. Recent experiments in rabbits show that hypersensibility to casein will produce the same reaction as in spasmophilics.

DR. PERCY D. PEABODY, Webster: Following this regulation diet, is there a change in the electrical reaction toward the normal in these subjects, or is there a diminution in the symptoms?

DR. F. W. SCHULTZ: It is singular that spasmophilics cannot have carbohydrates exclusively. Some cases of spasmophilia arise from carbohydrate feeding, and when we reverse the food and put the patients on different milk, we check it in that way. The reactions change to normal if the proper diet is carried out. With the phosphorus-cod-liver-oil therapy

you can have the child return to a normal state with the reactions and everything.

Emergency Surgery in Country Practice

DR. M. M. GROVE, Dell Rapids: The important factors in successful emergency surgery are: (1) to establish early diagnosis by careful and thorough examination; (2) good judgment in the choice of operation and necessary skill in its performance; (3) familiarity with the technic best adapted to the case; (4) favorable surroundings; (5) free drainage in all cases in which any chance of infection is possible, and (6) last but not least, the use of a little common sense. Unless one is familiar with the proper technic and has shown the necessary skill in doing major surgery under favorable conditions, he is not justified in attempting major emergency work under adverse conditions.

Lesions of the Urinary Tract Produced by Disease of the Genital Tract in the Female

DR. A. C. STOKES, Omaha: Hydronephrosis must be regarded as of mechanical origin in the great majority of cases, and except in a few instances of congenital origin may be traced to malpositions, strictures, stones or inflammations obstructing the ureter or the pelvis of the kidney. With the advent of the cystoscope and the use of bismuth and wire ureteral catheters we have shown that malpositions of the ureter are not uncommon; also, that a certain number of these conditions originate from pelvic inflammations, displacements and growths. Hydronephrosis is one of the most commonly overlooked conditions with which we deal. Its symptoms are often regarded either of no particular moment and dismissed by the physician, or they are placed at the door of the appendix, the gall-bladder, the stomach or colon.

(*To be continued*)

Current Medical Literature

AMERICAN

Titles marked with an asterisk (*) are abstracted below.

Albany (N. Y.) Medical Annals

May, XXXV, No. 5, pp. 243-302

1 *Treatment of Parasyphilitic Nervous Diseases and Late Syphilitic Nervous Manifestations by Intraspinous Therapy. A. Krida, Schenectady.
2 Saratoga and Its Mineral Waters. A. W. Ferris, Saratoga Springs.
3 Bender Hygienic Laboratory. H. S. Bernstein, Albany.
4 Laboratory Diagnosis of Syphilis of Nervous System. H. P. Carpenter, Poughkeepsie.

June, No. 6, pp. 303-350

5 Psychosis of Adolescence. J. M. Mosher, Albany.
6 Abdominal Symptoms. D. C. Moriarta, Saratoga Springs.
7 Medical Inspection and Examination of Schoolchildren. P. V. Winslow, Wappinger's Falls.

1. **Parasyphilitic Nervous Diseases.**—Clinically, of 8 cases of tabes treated by Krida, 4 were improved, 4 were unimproved. Of the latter, 3 had Charcot's joint lesions, and were of the most unsatisfactory type to treat; the fourth, had there been opportunity for further observation and treatment, Krida says, might well have responded to subsequent injections. In the cases of general paresis, the focal symptoms yielded quite promptly to treatment, while the mental condition was but little influenced. The septic paraplegias presented the most definite clinical improvement, every case being favorably influenced. From the laboratory standpoint, changes in the 3 reactions in the spinal fluid: cystosis, protein content, and Wassermann reaction, in contradistinction to the favorable outcome in the large majority of the reported cases, were more resistant to treatment, and did not keep pace with the clinical improvement. In only 1 case did a positive Wassermann reaction become even temporarily negative.

Among the other cases, there were several in which one or more of the three reactions were not pathologic or where subsequent comparisons could not be made for various reasons. Excluding these, there were 12 cases that had strongly positive Wassermann reactions. In 4 the reaction was diminished in intensity; in 7 it was practically uninfluenced. Of 13 cases the cytosis was greatly diminished in 6, and only moderately diminished or uninfluenced in 7. Of 10 reduced to normal in 6, and diminished in 4.

Archives of Diagnosis, New York

April, VII, No. 2, pp. 101-200

8 Living Pathology. J. B. Deaver, Philadelphia.
9 *Fundamental Considerations in Differentiation of Gastric Neurosis from Organic Abdominal Disease. H. Z. Giffin, Rochester, Minn.
10 Carcinoma of Stomach with Acute Onset. Importance of Recognizing Early Symptoms of Disease. E. H. Goodman, Philadelphia.
11 Abdominal Rigidity. J. N. Hall, Denver.
12 Diagnosis of Malignancy. J. C. Stewart, Minneapolis.
13 Ante-Mortem and Post-Mortem Diagnosis. A. L. Benedict, Buffalo.
14 *Macroscopic Differential Diagnosis between Tuberculosis and Papilloma of Peritoneum. R. T. Morris, New York.
15 *Valuable Diagnostic and Prognostic Signs in Chorea of Children. H. Heiman, New York.
16 Mixed Infections in Tuberculosis. L. C. Ager, Brooklyn.
17 *Hitherto Undescribed Sign in Diagnosis of Chronic Uremia. T. F. Reilly, New York.
18 Case of Complete Heart-Block, with Post-Mortem Findings. R. D. Rudolf and G. W. Loughead, Toronto.
19 Anencephalia: with Special Reference to an Important Etiologic Factor. A. Gordon, Philadelphia.
20 Study of Deformity Curves in Tuberculosis of Spine, with Special Reference to Operative Procedure. W. Truslow, Brooklyn.

9. **Gastric Neurosis from Organic Abdominal Disease.**—Giffin states that it is the common experience of large surgical clinics that too many patients suffering from various types of abdominal and pelvic neurosis have been advised to undergo surgical treatment and the greatest number of mistakes is apparently made in connection with those cases in which the diagnosis and prognosis should not be difficult. On the other hand, most searching examinations are often required in cases which, at the first examination, appear to be neurotic, in order to avoid the occasional mistake of not recognizing an abdominal lesion. Cases of gastric neurosis demand a very general kind of consideration. Important general factors which enter into this consideration are: 1. The analysis and grouping of those symptoms referable to hypersensitiveness and instability of the nervous system; 2. The careful exclusion of those diseases which, in a reflex manner, so commonly produce an indigestion of the functional type; 3. The realization that variability, both in the story that the patient tells and in the symptoms from time to time, is most important; 4. The application of the Roentgen findings; 5. The recognition of certain psychic elements; 6. A review of these data in the light of the personal and family history of the patient.

14. **Peritoneal Papilloma and Tuberculosis.**—A certain number of cases of tuberculosis of the peritoneum present macroscopic characteristics which are very different from those of the familiar miliary tuberculosis of the peritoneum. Morris cites a case in which on opening the peritoneal cavity it was found that various loops of bowel thickened with interstitial infiltrates were so massed together by adhesions that it was impossible to approach the pelvic cavity without tearing fragile bowel walls. Free peritoneal surface was studded with large elevated masses of neoplastic deposit, but without accompanying areas of acute inflammatory character. Morris' diagnosis was that of malignant papilloma, and a prognosis to the effect that the patient had a very short time to live. A drain was inserted and the abdomen closed. About a year later he happened to meet one of the consultants in the case and ask how long the patient had lived. He replied that she was quite well, and gained twenty or thirty pounds in weight and that her cure had been ascribed to Christian Science.

Morris' opinion having been accepted as final from responsible medical sources, the family had yielded to the importunities of friends and allowed the patient to be cared for by Christian Scientists. Up to this time Morris had been so

sure of the diagnosis of malignant papilloma that the specimen which had been placed in a bottle of alcohol had not even been examined. The specimen on being examined showed that characteristic feature of tuberculosis. Recovery had apparently occurred in the ordinary way through hyperleukocytosis excited by the opening of the peritoneal cavity.

15. **Diagnostic and Prognostic Sign in Chorea.**—The sign described by Heiman may be produced in the following manner: the palm of the patient's left hand is placed on the palmar surface of the observer's right hand. Then the thumb of the patient is embraced by the index and middle fingers of the physician and the other four fingers firmly grasped by the remaining fingers of the examiner. The right hand of the patient is similarly grasped by the left hand of the physician. The attention of the patient is then invited by asking him a simple question, for instance, his name, age, address, etc., at the same time having him look directly into the eyes of the examiner. If the patient has chorea, the twitchings of the hands will be distinctly augmented each time his attention is engaged by the mental concentration required to answer a question. The firmer grasp the observer has on the patient, and the more he is able to disengage the patient's attention from the examination, the more surely will he be able to discern the finer muscular twitchings indicative of the early stage of chorea. This test is said to be very delicate and is often present when choreic movements of the extremities cannot be seen.

17. **New Sign in Chronic Uremia.**—Reilly found that in very many cases of high arterial tension without any digestive symptoms, a sense of bad taste would occur, often antedating other symptoms by months. The patient rarely complains of it because he thinks that it only represents an upset stomach. In forty cases of high arterial tension associated with other signs of nephritis, seen within the last year thirty had experienced the symptom for a greater or lesser period of time. As a rule, the complaint in the beginning was restricted to the time shortly after awakening in the morning, and disappeared first on washing the mouth, and later only after breakfast. Then it might disappear entirely for a few weeks to reappear later on. In this way it closely resembles the severe uremic headache so characteristic of the early morning hours. In other cases, the bad taste was complained of after exertion or at the close of the day when the patient was fatigued. The bad taste diminishes and disappears just in proportion as the general underlying condition improves. In general it may be stated that the more constantly it is present, the worse the prognosis.

Archives of Pediatrics, New York

May, XXXI, No. 5, pp. 321-400

21 *Pneumococcic Meningitis and Meningismus. Report of Cases. F. Huber, New York.
22 Case of Gaucher's Disease in Boy Thirteen Years of Age. Splenectomy with Recovery. C. Herrman, H. Roth and E. P. Bernstein, New York.
23 Organization of an Out-Patient Clinic. R. M. Smith, Boston.
24 Care of New-Born. C. G. Leo-Wolf, Buffalo.
25 *Case of Anorexia Nervosa in an Infant. N. G. Orchard, Rochester.
26 Chondrodystrophia Fetalis. J. K. Young, Philadelphia.

21. **Pneumococcic Meningitis and Meningismus.**—The four cases detailed by Huber present a number of special features in common. The well-marked cerebral symptoms with coma, the cerebrospinal fluid being free from bacteria were striking. The presence of eye symptoms, etc., rendered the diagnosis less difficult. From a study of pneumococcus infection, Huber says, it is evident that the underlying anatomic changes inducing the cerebral manifestations in the class of pneumonia discussed vary within wide limits. We may have a well-developed meningitis or meningo-encephalitis without any focal symptoms; that is, when the process involves the so-called silent areas in the brain. On the other hand, we may have cerebral disturbance equally pronounced, in which the post-mortem findings are limited to a leukocytic and lymphocytic infiltration with slight edema of the involved parts of the brain and meninges. The pneumococci are found in the spinal fluid in cases in which the entire cerebrospinal canal is involved. Localized meningitis or meningo-encephalitis with or without a plastic exudate reveals the organism at the local seat of trouble, the cerebrospinal tract not being involved as a whole in the process. In practice, therefore, it is essential that the clinical history be taken into consideration—for lumbar puncture may not throw any light on the case. A negative result is not conclusive; only positive findings are of value.

25. **Case of Anorexia Nervosa in Infant.**—A healthy infant, unincumbered by parental taint, manifested a determination not to take food. So far as could be determined the sole cause was the substitution of a new nipple for an old one. A persistent refusal to take any food offered in any manner resulted in a loss of nearly three pounds. Added to this was the lack of any organic lesion to explain the disease. Gavage lasting four days, was followed by a gradual surrender on the part of the infant.

Arizona Medical Journal, Phoenix

May, II, No. 4, pp. 5-23

27 Carcinoma of Cervix. J. T. Stoddard, Pueblo, Colo.
28 Treatment of Pneumonia. J. J. P. Armstrong, Douglas.
29 Subparietal Rupture of Kidney. J. M. Pearson, Glendale.
30 Syphilis, Prophylaxis and Treatment. W. G. Bryan, Bisbee.

Boston Medical and Surgical Journal

June 11, CLXX, No. 24, pp. 897-936

31 Present Status of Psycho-Analysis. J. J. Putnam, Boston.
32 Some Personal Results in Psycho-Analysis and Future of Psychotherapy. L. P. Clark, New York.
33 Indications for Operation on Seminal Vesicles. J. B. Squier, New York.
34 Cancer of Uterus. F. Cobb, Boston.

Bulletin of Johns Hopkins Hospital, Baltimore

June, XXV, No. 280, pp. 165-194

35 *Continuous Propagation of Amebic Dysentery in Animals. W. A. Baetjer and A. W. Sellards, Baltimore.
36 *Blood-Picture in Hodgkin's Disease. C. H. Bunting, Madison, Wis.
37 *Hodgkin's Disease. C. H. Bunting, Madison, Wis.
38 *Clinical Consideration of Hodgkin's Disease. J. L. Yates, Milwaukee, Wis.
39 Charles Bell: His Artistic Qualities. E. R. Corson, Savannah, Ga.

35. **Propagation of Amebic Dysentery in Animals.**—Two strains of amebic dysentery were investigated by Baetjer and Sellards with the object of securing continuous propagation by subinoculation through a series of animals. The first strain was lost in the second passage by accident. The second strain was carried through eleven successive passages in kittens. This strain increased in virulence and no degenerative changes appeared in the morphology of the entameba obtained at the site of active lesions. The characteristics of the clinical course and pathologic lesions were retained throughout the eleven passages. The propagation proved to be considerably complicated by the virulence of the accompanying bacteria. The successful propagation of one strain through eleven passages in animals, with an increase in virulence of the entameba and a retention of the typical features of their morphology, is in conformity with the general laws of protozoan and bacterial infections. The authors consider that the general behavior of this strain of amebic dysentery will prove to be typical of this species and that entameba histolytica will conform to the general rules of parasitology in regard to the subinoculation of a susceptible species of animals, especially with regard to the retention of virulence, through at least a moderate number of passages.

36. **Blood-Picture in Hodgkin's Disease.**—The series of cases studied by Bunting includes fifteen males and ten females, a somewhat higher percentage of the latter sex than is usually given. It is further rather striking that the great majority of the males are under the 33d year, while the majority of the females are above that age. The study of the blood in these cases has shown that there is a deviation from the normal leukocytic picture in all cases, but that there is not a single constant picture found in them. Instead, it is possible to divide the cases into two

distinct groups according to the differential count of the leukocytes. The first group, including cases of a year or less in duration, shows a normal or slightly increased total leukocyte count with a normal or decreased percentage of polymorphonuclear neutrophils.

The second group includes the cases of greater duration, for the most part, and shows a sharp leukocytosis, running in one case (as far as could be determined from the smear ratio of one white cell to twenty-nine red cells) to at least 100,000 leukocytes per cubic millimeter. This leukocytosis is accompanied by an increase of the neutrophils to a percentage between 72 and 90—a percentage not ordinarily considered of value in diagnosing a suppurative process in the body, yet occurring in Hodgkin's disease in the complete absence of pus formation. Throughout the disease there are two constant features, an increase in blood-platelets and an absolute increase in the transitional leukocytes. In regard to the other elements, in early cases there is a transitory increase in lymphocytes and basophils, and a deficiency in eosinophils, with a normal or low neutrophil count, followed by a gradual decrease in lymphocytes and a moderate eosinophilia. In late cases there is a marked neutrophil leukocytosis and a diminution in percentage in all other elements except the transitional leukocyte. All of these features of the blood-picture in Hodgkin's disease have been reproduced in the monkey following inoculation with the diphtheroid organism isolated from cases of the disease.

37. **Hodgkin's Disease.**—Hodgkin's disease Bunting claims is an infectious disease due to a diphtheroid organism, the *Bacterium hodgkini*. There may often be found a primary lesion at the portal of entry. While in some cases the organisms may remain for a long time localized in the vicinity of the portal of entry, in other cases they early gain entrance into the general circulation, and may be widely distributed. The organism and its toxin show a special affinity for lymphoid tissue, and produce in this the characteristic changes of Hodgkin's disease, changes varying somewhat according to the intensity of the toxin but resulting ultimately in the sclerosis of the glands. There is at the same time an interglandular inflammatory process, at times very acute, but resulting finally in a dense sclerotic tissue. There are also characteristic blood changes in the disease. The glandular changes can then be considered only as the result of a toxic action, and contribute to the patient's death merely incidentally, when certain gland groups are extensively enlarged. The cells of the enlarged glands, though atypical, show none of the antagonism to the other body cells characteristic of malignant neoplasms.

38. **Clinical Consideration of Hodgkin's Disease.**—Hodgkin's disease Yates regards as a localized process, susceptible of cure when properly treated as a malign, though chronic infection. It may persist for years without manifesting itself save in the blood-picture so that cures may not be assumed until after an uninterrupted duration of years of persistently normal conditions. A sovereign remedy for all cases is not now conceivable. At present the greatest need is some therapeutic agency to control glands not directly accessible; for once extension, which may occur early, has reached either the thorax or abdomen the prognosis becomes relatively, if not absolutely, hopeless.

California State Journal of Medicine, San Francisco

June, XII, No. 6, pp. 219-262

40 Social and Industrial Insurance. F. C. E. Mattison, Pasadena.
41 Ununited Fractures. J. T. Watkins, San Francisco.
42 Los Angeles Deaths from Intraspinal Neosalvarsan Injections. E. S. May, Oakland.
43 Intracranial Complications Following Abscess in Middle Ear. A. Baer, San Francisco.

Canadian Medical Association Journal, Toronto

June, IV, No. 6, pp. 469-564

44 Development of Obstetrics. B. P. Watson, Toronto.
45 Hemorrhagic Diseases. J. W. McIntosh, Vancouver.
46 Roentgenoscopy in Diagnosis of Gastric Ulcer. W. A. Wilkins, Montreal.
47 *Traumatic Asphyxia. Report of Six Cases. L. B. Robertson, Toronto.
48 Four Cases of Thrombosis of Lateral Sinus with Recovery. G. H. Mathewson, Montreal.

47. **Traumatic Asphyxia.**—All of the cases reported by Robertson were admitted to Bellevue Hospital on the evening of Feb. 2, 1913, having sustained their injuries in a stampede from a moving picture theater after a cry of "fire" had been raised. The condition is usually produced by pressure about the abdomen and chest persisting long enough to cause a cessation of respiration for an appreciable length of time. In a typical case the patient may be unconscious if seen immediately or shortly after the injury. Cyanosis of the scalp, face, neck and chest down to the third or fourth rib anteriorly is present. The lips and tongue may be somewhat swollen and together with the mucous membranes exhibit the same purplish tint as the skin. The discoloration extends just over the prominence of the shoulders, and for a short distance down the back, sometimes even outlining the double triangle of the lower portion of the trapezius muscle. Closer examination of this discolored area reveals the presence of more or less scattered petechial hemorrhages.

A prominent and sometimes startling feature is the subconjunctival hemorrhage. The cyanosis and hemorrhage obtain only in the upper part of the body, apparently on account of the lack of competent valves in the veins of this region, and in support of this explanation it has been shown that the veins of the neck can be injected in a direction against the blood-stream with comparative ease, while considerable difficulty is encountered if this is attempted in the veins of the arm or leg. The infrequency of cerebral hemorrhage is explained by the support given to the blood-vessels of the brain and meninges by the intracranial pressure, analogous to the support of the retinal vessels by the intra-ocular pressure. External pressure on the skin sufficient to give support to the superficial capillaries will also prevent distension or rupture of the latter. The discoloration of the skin is due to the mechanical over-distension of the vessels with resultant stasis and hemorrhages from the small capillaries.

The only treatment given by Robertson, apart from that indicated for the associated injuries, was rest in bed, light diet and sedatives for the nervous reaction which followed the shock of the injury. In two cases showing pulmonary conditions the therapy usual in such conditions was carried out. Only two deaths occurred in this series—the result of pneumonia.

Illinois Medical Journal, Chicago

June, XXV, No. 6, pp. 357-419

49 Increasing Death-Rate in People Past Middle Life and Possibility of Its Reduction. C. J. Whalen, Chicago.
50 Roentgenography in Diagnosis of Diseases of Children. J. P. Sedgwick, Minneapolis.
51 Appendicitis in Infancy. G. E. Baxter, Chicago.
52 Bovine Tuberculosis. M. P. Ravenel, Madison, Wis.
53 Silver Dento-Maxillary Splint. W. J. Thompson, Chicago.
54 Infant-Feeding in Earlier Months. A. H. Roler, Evanston.
55 Intravenous Medication. A. F. Stotts, Galesburg.
56 Intravenous Administration of Salvarsan in Treatment of Syphilis. C. A. Buswell, Chicago.
57 Recent Advances in Our Knowledge of Pertussis. J. R. Gerstley, Chicago.

Journal of Biological Chemistry, Baltimore

June, XVIII, No. 1, pp. 1-132

58 Nutritive Properties of Proteins of Maize Kernel. T. B. Osborne and L. B. Mendel, New Haven, Conn.
59 Comparative Chemistry of Muscle: Betain from Scallop, Periwinkle and Lamprey: Creatin from Lamprey. D. W. Wilson, New Haven, Conn.
60 *Certain New Principles Concerning Mechanism of Hyperglycemia and Glycosuria. A. A. Epstein and G. Baehr, New York.
61 Formation of Amino- and Hydroxy-Acids from Glyoxals in Animal Organism. H. D. Dakin and H. W. Dudley, New York.
62 *Urea: Its Distribution in and Elimination from Body. E. K. Marshall, Jr., and D. M. Davis, Baltimore.
63 Chemistry of Gluconeogenesis. VIII. Velocity of Formation and Elimination of Glucose by Diabetic Animals. A. I. Ringer and E. M. Frankel, Philadelphia.

V. 191

64 *Studies of Carbohydrate Metabolism. VI. Influence of Thyreoparathyroidectomy on Sugar Content of Blood and Glycogen Content of Liver. F. P. Underhill and N. R. Blatherwick, New Haven, Conn.
65 Formation of Benzoyl Carbinol and Other Substances from Phenyl Glyoxal by Action of Fermenting Yeast. H. D. Dakin, New York.
66 *Suppression of Growth and Capacity to Grow. T. B. Osborne and L. B. Mendel, New Haven, Conn.
67 Metabolism of Endogenous and Exogenous Purines in Monkey. A. Hunter, Ithaca, N. Y.
68 *Formation of Glucose from Citric Acid in Diabetes Mellitus and Phlorhizin Glycosuria. I. Greenwald, New York.
69 On Chondroitin Sulphuric Acid. P. A. Levene and F. B. La Forge, New York.
70 Non-Interference of "Ptomaines" with Certain Tests for Morphin. J. Rosenbloom, Pittsburgh.

60. **Hyperglycemia following Hemorrhage.**—Contrary to Bang's opinion, the observations made by Epstein and Baehr seem to demonstrate that the hyperglycemia following simple bleeding is not merely psychic, but that it is a compensatory response on the part of the organism to keep the total blood-sugar up to a level commensurate with the needs of the tissues. In view of the diminished blood volume this is accomplished by an increase in the concentration. Similarly, if the total volume of fluid in circulation be not diminished, the blood withdrawn being immediately replaced by saline solution, the percentage concentration of the diluted blood rapidly rises (with occasional exceptions) to what it was before the experiment. In other words the total sugar in the circulation remains unchanged. It would seem therefore that at least under such conditions as in the experiments, cited an increase in the percentage of sugar in the blood is only indicative of a relative, that is to say percentile, but not of an absolute hyperglycemia.

The experiments suggest very strongly that glycosuria is the result of an absolute hyperglycemia and need not occur when the hyperglycemia is only relative. This would help explain the presence in certain individuals of glycosuria without hyperglycemia, and conversely the absence of glycosuria when hyperglycemia is present. The authors suggest the advisability of studying blood volumes and computing therefrom the total blood-sugar in cases of diabetes mellitus, for therein may lie the explanation for the disproportion between the degree of hyperglycemia and the intensity of the glycosuria, which occurs so frequently in this condition.

62. **Distribution and Elimination of Urea.**—The conclusions drawn by Marshall and Davis from their experiments are: Urea is present in all the organs and tissues of normal animals. The urea content of all organs and tissues is approximately uniform, and approximately equal to that of the blood, both in normal conditions and when there is an abnormally large amount of urea present. Exceptions to this rule are fat, which has a low content, and the urinary tract, which has a high content. When urea in solution is injected intravenously, it diffuses to all parts of the body almost instantly, the diffusion being complete in a few minutes. Urea is eliminated very rapidly by the kidneys; the rate of excretion may rise to 16 gm. per kilo of body weight per day, or much higher. The rate of excretion of urea in normal animals is directly proportional to the concentration of urea in the blood; it may be retarded, however, by dehydration of the organism. When excretion of urea is prevented, the entire amount formed is stored in the body—except small amounts secreted in the bile, sweat, etc.—and there is no evidence of the conversion of urea into other substances.

64. **Thyreoparathyroidectomy.**—Underhill and Blatherwick report experiments, the results of which demonstrate that the thyroid-parathyroid mechanism stands in an intimate connection with carbohydrate metabolism. It is also indicated that the parathyroids are the active agents of the mechanism under discussion. Their experiments show that during the tetany which develops after thyreoparathyroidectomy glycogen entirely disappears from the liver and blood-sugar content is markedly lowered or may even be reduced to zero. It is also indicated that this action may be ascribed to the lack of parathyroid tissue since the phenomena may be observed when all the parathyroids are removed and some thyroid tissue remains. The reverse operation, that of removing the thyroids and leaving the parathyroids intact, has not been carried through in the present investigation since there is little to indicate that any abnormal effect would be produced inasmuch as dogs in their laboratory have lived with four parathyroids only for two years without visible metabolic disturbances. The data yielded after thyreoparathyroidectomy resemble closely those obtained as a result of phosphorus and hydrazin poisoning.

66. **Suppression of Growth.**—The experimental results reported by Osborne and Mendel give no support to the widespread view that the capacity to grow, or growth impulse, is lost with age, independently of whether it has or has not functioned during the period usually associated with increase in size. It appears as if the capacity to grow is only lost by the exercise of this fundamental property of animal organism. Whether the span of life can be prolonged by delaying the completion of growth has not yet been ascertained under conditions that preclude disease or other anomalies of nutrition.

68. **Formation of Glucose from Citric Acid.**—The administration of sodium citrate to phlorizinized dogs and to a patient with diabetes mellitus was followed by an increased excretion of glucose indicating the conversion of the six carbon atoms of citric acid into glucose.

Journal of Nervous and Mental Diseases, Lancaster, Pa.

May, XLI, No. 5, pp. 273-344

71 Coordination of Movement. W. J. M. A. McKenney, New York.
72 Syphilitic Tests in Latent and Treated Syphilis. E. P. Corson-White and S. D. W. Ludlum, Philadelphia.

Lancet-Clinic, Cincinnati

May 30, CXI, No. 22, pp. 619-646

73 Present Status of Typhoid Vaccine in Prophylaxis and Treatment. T. Potter, Indianapolis.
74 Dermatitis Exfoliativa. Case-Report. J. W. Miller, Cincinnati.
75 Practical Differential Tests of Hearing. A. Randall, Philadelphia.

June 6, No. 23, pp. 647-686

76 Tetany. H. H. Hoppe, Cincinnati.
77 Radium Treatment of Cancer. J. and J. L. Ransohoff, Cincinnati.
78 Complications and End-Results of Bile-Duct Infection. J. E. Pirrung, Cincinnati.
79 Medical Teaching. J. W. Rowe, Cincinnati.

Medical Record, New York

June 13, LXXXV, No. 24, pp. 1039-1104

80 Word of Caution Concerning Palpation under Fluorescent Screen. J. T. Case, Battle Creek, Mich.
81 Trigger Finger: Its Cause and Mechanism. A. B. Judson, New York.
82 Pruritus Ani. J. M. Lynch, New York.
83 *Needle Protruding through Wall of Stomach. O. C. Smith, Hartford, Conn.
84 Subsequent Report of Patients Who Received Injections of Friedmann Vaccine over Year Ago. G. Manheimer, New York.
85 Should Sanitary Control of Prostitution Be Abandoned? J. Rosenstirn, San Francisco.
86 Clinical Estimation of Cholesterinemic Index. C. K. Austin, Paris.
87 Management of Cardiorenal Disease. C. E. Nammack, New York.
88 *Vaccine Treatment of Chronic Rheumatism. H. Greeley, Brooklyn.

83. **Needle Protruding through Wall of Stomach.**—A woman, aged 37 years, of neurasthenic tendency, was operated on for calculous nephritis and the right kidney was removed. Following her operation she regained her weight, and from a condition of invalidism became quite well. Early in August three years later she experienced sharp, transitory pains at the epigastrium, both at meal time and in the intervals. She gradually became afraid to eat, lost weight, and early in September vomited small quantities of a bloody mucopurulent fluid. The patient had no recollection of having swallowed any foreign body or poisonous material, nor was she in the habit of holding pins or needles in her mouth.

A roentgenogram revealed a normal stomach in size and contour, but showed clearly a foreign body, pin or needle, protruding 1½ cm. through the anterior stomach wall at a point 3½ cm. proximal to the pylorus, on the lesser curvature. The stomach was exposed and the pointed end of the needle, dark but not corroded, was found protruding through the wall of the stomach in the peritoneal cavity.

The needle was drawn out of the wall of the stomach by forceps, breaking immediately after its removal, the portion of the needle lying within the cavity of the stomach being extensively corroded. The small opening in the stomach wall was closed with two purse-string sutures and the wall of the abdomen was closed without drainage. The stomach regained its normal function within a few days, and the patient regained her lost weight.

88. **Vaccine Treatment of Chronic Rheumatism.**—As it is apparent from the remarkably large masses of streptococci that can be scraped from the pharynx of most of these patients that such abnormal quantities must be consequent on diminished specific general resistance, and as in all cases a vaccine prepared from them gives diagnostic focal reactions, under conditions aforementioned, Greeley states it is hardly worth while to attempt the difficult and sometimes impossible isolation from the blood or the joint. However, if one prefers, a similar and equally effective streptococcus may be isolated from the urine in all cases. Of the fifty-three vaccines which he has prepared for such treatment during the past year, five only were from the blood and some fifteen from the urine. As there appeared to be no difference in effectiveness between these and those made from the pharynx he took all others from the latter.

In the series cited by Greeley, varying in severity from occasional attacks of pain and stiffness in one or more joints to disabling swelling of both knees often lasting for weeks, universal improvement was effected by autogenous vaccines. This ranged from total cure, in the mild cases, to disappearance of all symptoms except transitory slight stiffness in the most severe, which improvement has now endured from six months to a year. Of course, Greeley says, such patients may experience other attacks, but if they should a repeated treatment would soon pick them up again, and as it is neither painful nor expensive it would not be feared. Entirely similar results are now being obtained in the other cases now under the same treatment. Greeley emphasizes that as a first principle of such treatment no case should be given a dose of vaccine during an exacerbation, marked by acute joint swelling, attacks of pain or temperature elevation. Furthermore, the vaccine must be autogenous —made from the patient's own organisms.

Michigan State Medical Society Journal, Grand Rapids

June, XIII, No. 6, pp. 355-416

89 Modern Treatment of Fractures. M. L. Harris, Chicago.
90 Crotalin Treatment of Epilepsy—Tabulated Report of Twenty-Two Cases. J. H. Douglass, Lapeer.
91 Carcinoma of Breast. H. J. Van den Berg, Grand Rapids.
92 Vaccines and Immunity in Their Relation to Surgery. O. A. Hart, St. Johns.
93 Ether Anesthesia. W. C. Huyser, Kalamazoo.
94 Intravenous Anesthesia. C. L. Candler, Detroit.
95 Non-Gravid Hydrorrhea Due to Hysteria. II. Abdominal Cesarean Section for Contracted Pelvis in Child of Twelve. III. For Threatened Eclampsia. R. Peterson, Ann Arbor.
96 Two Cases of Paraplegia Operation Followed by Improvement. C. D. Camp, Ann Arbor.
97 I. Chancre of Lip with Early Involvement of Nervous System. II. Dermatosis in Patient Exhibiting Neurologic and Psychiatric Findings. U. J. Wile, Ann Arbor.
98 Bilateral Specific Disease of Labyrinth with Left Facial Paralysis of Peripheral Type. II. Otitic Thrombosis of Sigmoid Sinus without Symptoms. R. B. Canfield, Ann Arbor.
99 Four Unusual Cases of Strabismus. G. Slocum, Ann Arbor.
100 Demonstration of Electrocardiograph. F. N. Wilson, Ann Arbor.

New Jersey Medical Society Journal, Orange

June, XI, No. 6, pp. 271-324

101 Bone and Joint Surgery. G. H. Sexsmith, Bayonne.

New York Medical Journal

June 13, XCIX, No. 24, pp. 1165-1216

102 *Insolation. P. G. Woolley, Cincinnati.
103 *Treatment of Rheumatic Fever. H. C. Wood, Jr., Philadelphia.
104 Urethral and Prostatic Symptoms Caused by Large Internal Pile. V. C. Pedersen, New York.
105 Modern Trend in Treatment of Malignancy. R. H. Boggs, Pittsburgh.
106 Hypertrichosis in Women. J. H. Claiborne, New York.
107 Practice of Medicine Act. W. J. Cruikshank, New York.
108 Post-Mortem Examinations among Jews. C. D. Spivak, Denver.
109 *Teaching of General Medicine. C. H. Neilson, St. Louis.
110 Cesarean Section for Double Multilocular Ovarian Cyst. G. L. Brodhead, New York.
111 Magnetized Needle Holder. C. M. Stimson, Philadelphia.
112 Facilitating Crile Method of Transfusion. A. Kahn, New York.

102. **Insolation.**—Treatment of an attack of insolation, Woolley says, combines refrigeration with elimination, both active enough to produce good effects without embarrassing organs, such as the heart, which are already damaged. To accomplish the former the practice is to give ice cold packs or baths. To compass the latter recourse is commonly had to stimulants. This latter in Woolley's opinion seems not to be best, except as a last resort. Stimulation of an already burdened organ can do little good and much damage. Hydrotherapeutic methods he believes are of more value in insolation than drugs. Ice packs or iced baths have a great value, but should not be continued for more than a few minutes at a time and should be discontinued when the rectal temperature has reached 104 F. To replace the water lost to the body before the attack, and to increase elimination, there is no better method than infusion of saline solutions. If it is true that the oxygen content of the body is low and the acid content high, then such solutions should be alkaline. Woolley believes that such alkaline solutions as those recommended by Fischer are extremely efficacious whether given by rectum or intravenously, in neutralizing the acids of the body and increasing water elimination by the kidneys. The solution for rectal use he urges should be prepared as follows:

Sodium chlorid	30 gm.
Sodium carbonate (crystallized)	20 gm.
Water	1,000 c.c.

The injection should be given slowly enough to allow retention. The time consumed in injecting a liter should not be less than one hour.

For intravenous injection the following solution may be used:

Sodium chlorid	14 gm.
Sodium carbonate (crystallized)	10 gm.
Water	1,000 c.c.

This also should be given very slowly.

The effect of these solutions on the secretion of urine, Woolley states, is remarkable, and as a rule they will make it unnecessary to use digitalis. When this latter drug is used, it should be very carefully administered and its effects carefully watched. The use of strychnin is not advised in the active stage of the disease.

Such treatment will dispose of the immediate danger, and when this has been done treatment is symptomatic. In apyrexial heat exhaustion external hydrotherapeutic measures are uncalled for, and treatment should be eliminative and stimulative. The internal hydrotherapeutic methods should be very useful in these cases and should be combined with friction, massage, warm packs with sufficient internal stimulant medication. After recovery from an attack of insolation great caution must be observed by the patient to prevent recurrences from subsequent exposures to heat.

103. **Treatment of Rheumatic Fever.**—Wood believes that the local treatment should aim at encouraging rather than diminishing the joint congestion. By far the most important local measure is the immobilization of the inflamed joint, and protection. Measures which encourage the hyperemia, such as wrapping the limb in cotton batting, hot applications and mild counterirritation are of sufficient usefulness to justify their employment if they do not interfere with the efforts at restraint of motion. Fever is a defensive reaction. Unless it becomes excessive, as however it rarely does in this condition, it does not demand active interference. But the disturbed metabolism, the result of the high temperature, necessitates the employment of measures to maintain the nutritive condition of the patient. Foremost among these is rest in bed. This is important, not only, as in other fevers, to lessen tissue waste and conserve strength, but also because of the peculiar danger of cardiac complications of this infection.

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As regards the diet, he gives milk with the addition of some form of starchy food, preferably a thoroughly cooked cereal, such as toasted bread, or rice which has been boiled six or eight hours. The monotony of the diet may safely be varied, not only by serving the milk in the form of junket or flavored with chocolate, but also by the use of eggs. Small amounts of coffee or tea, to those who are accustomed to their use, add greatly to the comfort of the patient and are not injurious.

There is no necessity, in Wood's opinion, of upsetting the stomach by the use of the alkaline carbonates. The acetates and citrates are oxidized in the body into carbonates, and therefore act as systemic antacids; but because of their neutrality they do not interfere with gastric digestion. On the other hand if we administer a sodium or potassium carbonate or bicarbonate, a portion of it will combine with the hydrochloric acid of the gastric contents. The resulting chlorid is not only incapable of neutralizing any systemic acidity, but is also much less actively diuretic than the citrates. For these reasons Wood greatly prefers either acetate or citrate. The potassium salts, he believes, are slightly more active as diuretics than the corresponding salts of sodium, and increase the completeness of the oxidative processes in the body, thereby lessening the amount of uric acid to be excreted. The most pleasant way of administering potassium citrate is by acidulating with lemon juice or citric acid. From twenty to thirty grains of the salt should be given every two or three hours, or until the urine becomes alkaline in reaction.

109. Abstracted in THE JOURNAL, March 14, p. 880.

Old Dominion Journal of Medicine and Surgery, Richmond

May, XVIII, No. 5, pp. 237-277

113 Spartein Sulphate: Its Cardiovascular and Renal Actions. L. B. Wiggs, Richmond.
114 Case of Apoplexy Observed from Onset. B. M. Randolph, Washington, D. C.
115 Case of Cerebral Thrombus Following Injury. B. R. Tucker, Richmond.
116 Relation of Paroxysmal Hemoglobinuria and Raynaud's Disease. Report of Two Cases. R. S. Preston, Richmond.

Vermont Medical Monthly, Burlington

May 15, XX, No. 5, pp. 105-130

117 Arteriosclerosis. J. Gibson, St. Albans.
118 An Appeal to Cancer Research Institutions. A. F. A. King, Washington, D. C.
119 Case of Hystero-Epilepsy with Recovery and Comments on Psychanalysis. W. D. Berry, Burlington.

Washington Medical Annals

May, XIII, No. 3, pp. 173-231

120 Fundus Oculi. W. T. Davis, Washington.
121 Case of Polyposis Gastrica (Polyadenoma). D. S. Lamb, Washington.
122 Case of Breech Presentation at Eight and One-Half Months Complicated by Fibroids; Confirmed by Roentgenograms. P. Willson and J. H. Selby, Washington.
123 Tonsillectomy: Its Indications and Choice of Operation. W. H. Huntington, Washington.
124 Surgical Mortality from Standpoint of Anesthetist. H. W. Kearney, Washington.
125 Arteriovenous Anastomosis for Threatened Gangrene; Case-Report. H. H. Kerr, Washington.

West Virginia Medical Journal, Wheeling

June, VIII, No. 12, pp. 395-432

126 Cases of Nasal Reflex. G. A. Aschman, Wheeling.
127 Surgical Treatment of Nephritis. J. E. Cannaday, Charleston.
128 Pituitrin Displacing Forceps. G. R. Davis, MacDonald.
129 Alcoholism. R. M. McMillen, Wheeling.
130 Cancer of Breast. W. H. Young, Sistersville.

Wisconsin Medical Journal, Milwaukee

June, XIII, No. 1, pp. 1-34

131 *Serodiagnosis of Pregnancy. C. M. Echols, Milwaukee.
132 Indications for Vaccine and Serum Therapy. J. K. Chorlog, Madison.
133 Legal Responsibilities of Surgeon in Cases of Fracture. H. Reincking, Milwaukee.
134 Tumors of Carotid Body. A. H. Levings, Milwaukee.
135 Cancer and Cancer Problem. W. E. Ground, Superior.

131. Abstracted in THE JOURNAL, Nov. 1, 1913, p. 1657.

FOREIGN

Titles marked with an asterisk (*) are abstracted below. Single case reports and trials of new drugs are usually omitted.

British Medical Journal, London

May 30, 1, No. 2787, pp. 1165-1220

1 *Infantile Paralysis (Acute Anterior Poliomyelitis). Its Early Treatment and Surgical Means for Alleviation of Deformities. R. Jones.
2 *Type of Tubercle Bacilli Occurring in Sputum of Phthisic Persons. A. S. Griffith.
3 *Alterations in Blood Occurring in Hay-Fever. E. Emrys-Roberts.
4 Variations in Leukocytes in Certain Diseases. D. Thomson.
5 Suspension Laryngoscopy and Its Practical Use. G. Killian.

1. Early Treatment of Infantile Paralysis.—Jones lays down the lines on which medical treatment should be given to cases of poliomyelitis in their earliest stages, and emphasizes the fundamental importance of beginning that treatment at the earliest moment possible. Treatment at this stage habitually falls into the hands of the medical man in attendance and not into those of the surgeon; and Jones would make it a general rule that in every case the head and spinal column should be kept at rest from the very beginning of the attack. If the child has much pain in the spine and limbs, as not rarely happens, fixation of the spine and limbs gives more relief than any other procedure. In any case, to keep the spinal cord and head at rest, so far as possible, in acute poliomyelitis, is only to act in accordance with the general principles regulating the treatment of inflamed organs or areas in other parts of the body. It is important that this rest, continued through the acute and early convalescent stages, should be continued so as to prevent the adoption of faulty positions by the affected limbs in order that the deformities that are likely to follow the paralysis may be minimized. Until the tender stage of the disease has passed away—a matter of from three to eight weeks or even more, Jones says, no active treatment should be undertaken; it is argued that active myelitis may be present throughout the tender stage, so that treatment by massage or electricity would be premature.

Having drawn attention to the importance of complete rest during the early stages of infantile paralysis, Jones points out the necessity for great care when active treatment is begun. It is not the nervous part only of the neuromuscular apparatus that is damaged in infantile paralysis; the motor nerve cells in the anterior horns of the spinal cord are injured in this disease; but Jones believes it is not so generally realized that the affected muscles may suffer doubly—first, in their nerve-supply; and, secondly, by being themselves overstretched while thus disabled. Hence it is of great importance that from the first they should not be stretched, and to avoid this attention must be given to the position of the limb; and, again, that when massage and active movements are prescribed care should be taken to avoid the possibility of straining or overstretching the injured muscles. The massage must be very gentle at first, the movements must be carefully limited, and the limb must be put up in apparatus so as to keep the paretic muscles in a position of relaxation until they have improved in tone. The success of treatment depends on the maintenance of this muscular relaxation continuously until there is evidence that the damaged muscles have begun to recover. When this occurs, the position of relaxation may be gradually discontinued.

Jones gives a very clear and careful account of the various methods of treatment he has found effective in infantile paralysis, and he emphasizes and explains his points with a number of illustrative cases.

2. Type of Bacilli in Sputum of Phthisic Persons.—The object of Griffith's inquiry has been not only to discover cases of pulmonary tuberculosis which were expectorating bovine tubercle bacilli with the sputum, but also, and especially, to study the clinical course of such cases, and, if they ended fatally and a necropsy was obtained, to make careful investigation of the distribution, character and bacteriology of the tuberculous lesions.

The number of strains of tubercle bacilli obtained in culture from the sputum of 148 persons suffering from pulmonary tuberculosis was 186. From 115 of the sputum samples (115 individual patients) the cultures were isolated direct by means of antiformin. From 63 sputum specimens (63 patients), of which 30 had yielded cultures direct, cultures were obtained through the guinea-pig. The cultures derived from 147 of the patients were eugonic, while those (9 strains) obtained from several samples of sputum from the remaining patient were dysgonic. The 177 strains isolated from the sputa of the 147 patients produced on all the test media employed the luxuriant growths which are characteristic of the human type of tubercle bacillus.

The virulence of the tubercle bacilli present in 80 of these sputa has been tested on the rabbit. Of 27 rabbits inoculated subcutaneously with sputum from 27 patients, 2 died in 55 and 58 days, and showed a local caseous abscess, and slight tuberculosis of the lungs. The rest of the rabbits were killed after periods varying from 84 to 104 days. In 2 of these 25 rabbits a local lesion only was found, in one there was a local lesion and slight tuberculosis of the nearest glands. All the rest showed a local caseous abscess and tuberculosis of the lungs, the disease in the latter organs being slight in 22 rabbits and moderately severe in 2 rabbits; the nearest glands were affected in 6, and the kidneys in 5 of these 21 rabbits.

Of 43 rabbits inoculated subcutaneously with 10 to 50 mg. of culture from 43 patients, 3 died in 41 to 53 days, and showed a local caseous abscess and slight tuberculosis of the lungs, the nearest glands of one of the rabbits also being tuberculous. The remaining 40 rabbits were killed (a few died, but not of tuberculosis) in periods varying from 86 to 160 days. One of these showed a local lesion only. All the rest showed besides a local caseous abscess, some amount of dissemination; the lungs were tuberculous in each of the 39 rabbits, slightly in 33 and moderately severe in 6; the kidneys were slightly tuberculous in 11 rabbits; the nearest glands were tuberculous in 25, normal in 14 rabbits; in 1 rabbit there was tuberculosis of the mamma.

Rabbits to the number of 15 were inoculated intravenously with culture from 12 patients,the dose for each rabbit being 0.01 mg. The pathogenic effects produced by these cultures exhibited the range of variation which is usual after the intravenous inoculation of human tubercle bacilli. There was no indication from the pathogenic effects produced in any of the 85 rabbits, whether inoculated with sputum or with culture, of the presence in any of the sputa of tubercle bacilli of higher virulence than typical human tubercle bacilli.

3. **Alterations in Blood in Hay-Fever.**—Emrys-Roberts, himself a victim of hay-fever, made daily examinations of his blood for about eight weeks throughout the attack. The hemoglobin content varied from 65 to 80 per cent., the color index from 0.4 to 0.8 and the red blood-count showed an almost consistent polycythemia, while the leukocyte count showed an equally marked leukopenia. The polycythemia is unassociated with either an enlarged spleen or cyanosis.

The differential leukocyte count showed a diminution of polymorphs, a marked increase of large mononuclears and transitionals, a definite increase of eosinophils and the presence of occasional mast cells. The variation in rouleaux formation was not great. No correlation to the symptoms could be adduced in the case of the blood-platelets, the presence of phantom cells was noted throughout, and particularly noticeable were the large numbers, sometimes amounting to 5 per cent. of the total count, of "dead" leukocytes—that is, leukocytes whose nuclei had undergone complete degeneration and whose protoplasm had become unrecognizable. By the study of forms intermediate between healthy leukocytes and "dead" leukocytes it was possible to determine that by far the largest proportion were derived from large mononuclears and transitionals. In addition it was also noted that, throughout the attack, many of the leukocytes, more especially the large mononuclears and transitionals, exhibited well-marked vacuoles both in protoplasm and nucleus.

It was also noticed that the red blood-corpuscles showed decided variations in relative size, macrocytes and microcytes being always commonly found while distortions in shape were by no means uncommon, almost amounting to a definite poikilocytosis. The fusion of several red blood-corpuscles into the form of a rosette was noted from time to time. Polychromatosis was noted twice. No nucleated reds were seen at any time. The size and staining properties of the blood-platelets varied considerably, sometimes they were uniformly small, at other times there would be many large forms scattered about, while sometimes they would be stained deeply, at other times quite lightly. The blood during the interval between the attacks has become distinctly healthier, though it did not conform with the recognized standard of a normal blood

Indian Medical Gazette, Calcutta

May, XLIX, No. 5, pp. 169-212

6 Itinerating Dispensaries. H. E. Drake-Brockman.
7 Chronic Intestinal Stasis. F. Barnardo.
8 Relationship between Laboratory and Clinical Work. A. Whitmore.
9 Sclerocorneal Trephining for Staphyloma of Cornea—Seventeen Cases. C. H. Reinhold.
10 Abdominal Surprises. A. Neve.
11 New Operation for Cure of Vesicovaginal Fistula. F. C. Fraser.
12 Ascaris Infection. R. F. MacGregor.
13 Case of Bilharzia Disease. A. Hooton.

Journal of Obstetrics and Gynecology of British Empire, London

April, XXV, No. 4, pp. 175-230

14 Case of Superior Rectovaginal Fistula Dealt with by Abdominal Route after Preliminary Colostomy. T. W. Eden.
15 Treatment of Pregnancy Complicated by Morbus Cordis by Means of Cesarean Section under Spinal Anesthesia. J. Barris.
16 Advanced Extra-Uterine Pregnancy with Tuberculous Peritonitis. J. H. Croom.
17 Uterus Bicornis Bicollis; Six Months' Pregnancy Right Horn, Pyometra Left Horn. G. B. Marshall.
18 Acute Hydramnios Occurring with Uniovular Twins about Eighteenth Week of Pregnancy. G. B. Marshall.

Journal of Tropical Medicine and Hygiene, London

May 15, XVII, No. 10, pp. 145-160

19 Vaccine Lichen in Natives. A. J. Chalmers and W. Byam.
20 List of Blood-Sucking Arthropods from Lower Congo, with Vocabulary. M. Gamble.

Lancet, London

May 30, I, No. 4735, pp. 1515-1588

21 Surgical Treatment of Infantile Paralysis. R. Jones.
22 *Case of Intrinsic Cancer of Larynx. S. Thomson.
23 *Method by Which Remedial Agents May Be Mingled with Cerebral Cerebrospinal Fluid. C. A. Ballance.
24 Treatment of Parenchymatous Syphilis by Intracranial Medication. H. Campbell.
25 *Intrathecal Injection of Salvarsanized Serum. G. W. Spencer.
26 Occurrence of Ascites of Non-Tuberculous Origin in Chronic Recurrent Diarrhea in Childhood. F. J. Poynton and H. Paterson.
27 *Operation for Undescended Testicle. R. Thompson.

22. **Intrinsic Cancer of Larynx.**—Cancer of the vocal cords according to Thomson is, in early stages, a very slowly progressive and strictly limited process. In his case hoarseness dated from eight months, the cord was still mobile, and the disease was still superficial. Alteration of voice is the principal and may be the only symptom. Persistent hoarseness in any patient calls for a definite diagnosis. Diagnosis is based chiefly on inspection of the larynx. Only in certain cases, in which the growth is a superficial and not an infiltrating one, can it be confirmed by microscopic examination. The growth, even when it occupies almost the entire length of a vocal cord, can sometimes be completely removed by endolaryngeal operation in early cases. But this completeness can only be ascertained when, by laryngofissure, the remains of the vocal cord and adjoining soft parts have been removed and submitted to the pathologist.

Laryngofissure is, therefore, the operation of choice in all cases of endolaryngeal cancer. The operation offers the

best prospects: (1) because the disease remains for some time superficial and limited, and (2) because laryngofissure cannot be considered a dangerous operation. Statistic results show a lasting cure in 80 per cent. of cases, and if all cases presented themselves and were diagnosed early there is no reason why the results should not be even more satisfactory.

Thomson's patient is in good health, with a useful voice, and has no recurrence at the present date—that is, one and a half years after operation.

23. **Remedial Agents and Cerebrospinal Fluid.**—In a case cited by Ballance in which this method was employed the patient was anesthetized and the head arranged in a position as nearly vertical as possible. A trephine opening was made to the right of the middle line just in front of the bregma. The dura was then opened and the inner surface of the right cerebral hemisphere was gently drawn outward by means of a retractor (1 cm. wide) bent at a right angle. It had previously been ascertained that the anterior cornu of the lateral ventricle was distant 6½ to 7 cm. (roughly 2½ to 2¾ inches) from the surface of the scalp at the mid-line on the vertex. A cannula (having a lumen of 1 mm. and a length of 3 inches) was then passed through the anterior part of the corpus callosum about a quarter of an inch to the right of the middle line. It was felt to enter a cavity, namely, the anterior cornu of the lateral ventricle.

The cannula was fitted with a stylet whose rounded end projected beyond the end of the cannula. The passage of the stylet and cannula through the corpus callosum could not divide any vessel and might be thought of as pushing aside rather than cutting any of the commissural fibers of the corpus. On the entrance of the cannula into the lateral ventricle the stylet was withdrawn and cerebrospinal fluid escaped, not continuously, for there was a distinct ebb and flow due to the arterial pulsations or to the respiratory movements. A rubber tube attached to a graduated glass vessel was then fixed to the cannula and the infusion into the ventricle commenced, at first with normal saline solution and then with salvarsanized serum; of the serum varying quantities have been used from 35 c.c. to 60 c.c. As the infusion proceeded it was noticed that the brain bulged into the trephine opening, but on closer inspection it was clear that the bulge was not a brain hernia, but that the cortical subarachnoid space was filling up with fluid. The 90 c.c. of fluid (salt solution and serum) took about twenty minutes to infuse and the pressure varied from 6 inches to 18 inches. No ill effects have occurred from the injection of the serum into the ventricle. In the first case the fluid flowing very slowly the glass vessel was raised when a little respiratory difficulty occurred which was probably due to pressure in the fourth ventricle, the fluid not escaping quickly enough through the foramen of Majendie. It only remained at the conclusion of the infusion to withdraw the cannula from the lateral ventricle and to stitch up the scalp, which in each case has healed by first intention. No ill effects have followed the infusion.

Ballance has introduced salvarsanized serum on five occasions into the lateral ventricle; twice in two patients and once in a third patient. Ballance suggests that the method be useful for introducing remedial agents into the cerebral cerebrospinal fluid in other diseases of the brain besides that caused by syphilis. Sleeping sickness, meningitis, tetanus and epilepsy are such diseases. The passage of the cannula through the corpus callosum appears to be innocuous, and the operation as a whole with reasonable care is free of all danger.

25. **Intrathecal Injection of Salvarsanized Serum.**—Spencer believes that the intrathecal injection of salvarsanized serum offers a hopeful method of treating and arresting the progress of tabes and other parenchymatous diseases of the spinal cord. A cure of the lightning pains can almost definitely be promised. The injections, if carried out with special aseptic care and technic, do not endanger the patient's life.

27. **Operation for Undescended Testicle.**—The usual incision is made by Thompson for the exposure of the external opening of the inguinal canal, with two exceptions—it is longer and it is curved. The incision commences just internal to the anterior superior spine, and proceeds in a sinuous manner into the scrotum. The first part lies half an inch above, and parallel with, the outer half of Poupart's ligament. The second part is curved with its convexity directed downward and outward. It begins just above the middle of Poupart's ligament and terminates near the pubic spine. The third part curves downward into the scrotum, and is of equal length to each of the two other parts of the incision. Its convexity is directed upward and inward. The external ring is exposed and any hernia treated in the usual way. The vas is isolated with its accompanying artery and vein. The cremasteric plexus of blood-vessels and lymphatics is removed between ligatures.

A finger is introduced into the cavity of the scrotum and the testicle is brought down and placed in the scrotum, in which it is retained by an assistant. The extremities of the middle part of the incision are then united by a curved incision whose convexity is directed upward and inward, and an oval flap of skin and subcutaneous tissues, extending down to the external oblique muscle, is dissected and isolated. This oval flap is then transferred to the scrotal part of the incision and sutured to both sides of this part, so that its lower apex lies in the lowest part of the scrotal portion of the incision. The rest of the wound is then sewed up in the usual way. By this means the scrotum is appreciably enlarged and, as it were, stiffened by a portion of tissue which contains no "dartos" muscle, and therefore remains uncontracted.

Annales de Gynécologie et d'Obstétrique, Paris

May, XLI, No. 11, pp. 257-320

28 *Trismus Uteri Decapitating Fetus. (Retraction de l'utérus sur la tête foetale séparée par décollation.) Potocki and Sauvage.

29 Retro-Uterine Hematocele from Rupture of Ovarian Cyst. P. Lecène and R. Taitz.

28. **Trismus Uteri.**—Potocki and Sauvage report the decapitation of the fetus from spasmodic contraction of the uterus in a case of shoulder presentation at the middle of the seventh month. The mother was 17. The retraction was such that neither with the hand nor with instruments was it possible to evacuate the uterus during twenty-four hours of efforts. After the embryotomy, signs of infection became evident, compelling immediate action. Parotitis developed the day after the hysterectomy, probably a simple infection from the mouth favored by the repeated application of general anesthesia in the course of a few hours. The girl left the hospital in good condition a month later.

Bulletin de l'Académie de Médecine, Paris

May 19, LXXVIII, No. 20, pp. 665-669

30 Experimental Tuberculous Reinfection of the Lung. (Le concept bactériologique du terrain tuberculeux.) F. Bezançon.

31 Operations on Diabetics. M. Labbé. See Paris Letter, June 13, 1914, p. 1906.

Journal de Chirurgie, Paris

May, XII, No. 5, pp. 561-688

32 Treatment of Ankylosis by Murphy's Method Applied to the Knee. M. Guillot and G. Debelly.

33 Compression of the Rectum by Fibrous Masses Relics of Old Uterine or Tubal Processes; Two Cases. (Les fibroses péri-métro-rectales.) J. and P. Fiolle.

Journal de Médecine de Bordeaux

LXXXV, Nos. 21-22, pp. 357-386

34 Value of Association of Physiotherapy with Psychotherapy in Treatment of Psychoneuroses. A. Fraikin.

35 Simple Technic for Estimating Sugar and Lactic-Acid Content of the Blood. (Considérations générales sur la dégradation des hydrates de carbone dans l'organisme.) L. Chelle and P. Mauriac.

Journal d'Urologie, Paris

May 15, V, No. 5, pp. 545-680

36 Pneumaturia; One Case. M. Cealic and V. Ceocalteu.

37 *Suture of Ruptured Urethra. (Résultats éloignés des urétrorraphies circulaires suivies de dérivation.) G. Marion.

38 Vaccine Therapy of Acute Gonorrhea. (Traitement de la blennorragie aigue par le vaccin atoxique.) Jungano.
39 *Regional and Local Anesthesia in Urology. G. Lemoine
40 Papillomas Hiding Ureter Mouth. (Extirpation dans la vessie des papillomes volumineux à implantation péri-urétérale.) S. Rolando.
41 Tuberculosis of the Kidney. (Tuberculose rénale et constante d'Ambard.) G. Marion. (Tuberculose rénale à forme anormale.) M. Pillet.
42 Expulsion of Ureter Calculus after Injection of Glycerin. M. Perrier.
43 *Cystic Disease of the Kidneys. M. Mickaniewski.
44 Examination of the Urine. (La méthode des trois verres en urologie.) Grimani.

37. **End-to-End Suture of Urethra.**—Marion described in the April number of the *Journal*, 1912, the method of circular urethrorrhaphy over a large catheter, with temporary diversion of the urine, which he had then applied in four cases for rupture or stricture, traumatic or uncontrollable from any cause, or chronic fistulas in the perineum. He briefly summarizes the technic here and reports six further cases, all recently reexamined from six months to three years after the operation. The urethra was found permeable in all, the diversion of the urine having permitted the urethra to heal rapidly and smoothly.

39. **Local Anesthesia in Urology.**—Lemoine states that in his service at Brussels general anesthesia has long been entirely abandoned for urogenital work. This has much widened the field of operability, as the local anesthesia or blocking the nerve involved is comparatively harmless. His experience has been that the Sellheim-Kappis technic for blocking the dorsal and lumbar spinal nerves is easy, harmless and certain. The Danis technic is better for the sacral nerves. This induces analgesia of the pelvis in the simplest and most harmless manner. The epidural technic (Cathelin-Läwen) was not found practicable or reliable. Nine illustrations accompany the description of the technics and the areas which each renders insensible.

43. **Cystic Disease of the Kidney.**—The literature on this subject is reviewed, the conclusion being that the disease is almost inevitably bilateral and treatment can be only palliative as a rule unless intolerable pain, suppuration of the cysts, persisting hematuria or anuria compel intervention. Decapsulation of the kidney and cutting out all of the cysts or partial nephrectomy has given by far the best results to date. In case of suppuration, nephrotomy alone is justified if it cannot be avoided, but it should never be done in case of anuria. Puncture, incision and suturing the lips of the cyst to the skin have long been abandoned, except possibly when there is suppuration. The above conclusions are based on 194 cases compiled by Mickaniewski. Nephrectomy deprives the patient of some still functionally capable kidney tissue, and 30 per cent. of the 127 nephrectomized patients died. Conservative operations have a record of 49 per cent. mortality in 27 nephrotomies; 30 per cent. in 15 cases of punctures or incision. On the other hand, partial nephrectomy gave excellent results in the 3 cases in which it was applied, and even better results were obtained in all the cases by decapsulation plus excision of the cysts.

Lyon Chirurgical

May, XI, No. 5, pp. 425-548

45 Diverticula of the Small Intestine Other than Meckel's Diverticulum. A. Latarjet and J. Murard.
46 Regeneration of Nerve Tissue in the Test-Tube. (Régénération des cylindraxes in vitro.) R. Ingebrigtsen.
47 *Stoffel's Operation for Spastic Paralysis. J. Anzilotti.
48 Obliteration of Space Below the Liver with Gall-Stone Operations. (L'exclusion de la loge sous-hépatique en chirurgie biliaire.) X. Delore and L. Arnaud.

47. **Operative Treatment of Spastic Paralysis.**—Stoffel's method was discussed in THE JOURNAL, Feb. 8, 1913, p. 485, abstract 154.

Lyon Médical, Lyons

XLVI, Nos. 18-19, pp. 969-1068

49 Frequent Coincidence of Gall-Stones and Diabetes. Dufourt.
50 *Miliary Tuberculosis of the Meninges and Peritoneum Secondary to Tuberculous Metritis. M. Brette.
51 Heliotherapy of the Larynx. Collet.

50. **Miliary Tuberculosis from Caseous Metritis.**—Brette gives the history of the case described in the title and of another fatal case of tuberculous peritonitis in which an area of cheesy degeneration was found in the uterus. He concludes that in all cases of metritis the nature of which cannot be determined by clinical examination, tissue should be removed for inoculation and microscopic examination. In these cases the microscope showed the lesions characteristic of tuberculosis.

Presse Médicale, Paris

XXII, Nos. 42-43, pp. 401-420

52 *Psychoneuroses with Low Blood-Pressure. (Les psycho-névroses hyposphyxiques.) G. Maupetit.
53 *The Nervous System in Occupational Skin Diseases. (Rôle du système nerveux dans les dermites professionnelles.) P. Jourdanet.
54 *Prognosis in Chronic Nephritis from Urea Content of Blood. (Recherches sur la Constante uréo-sécrétoire d'Ambard.) F. Widal, A. Weill and P. V. Radot.
55 Etiology of Typhoid. H. Plotz (New York).

52. **Neurasthenia and Other Psychoneuroses with Abnormally Low Blood-Pressure.**—Maupetit refers to the syndrome described by Martinet in 1913 as *le syndrome hyposphyxique et insuffisance pluriglandulaire*. The trouble is essentially a weakness of the circulation and variability in the blood-pressure in different arteries while at the same time there is hypertension in the veins. The result is a vicious circle unless it can be broken up by raising the tone of the cardio-vascular system, giving the appropriate organ extract, stimulating the muscle system and increasing blood production and nutrition in general by subcutaneous injections of oxygen, subcutaneous injections of physiologic salt solution and regulation of the diet to avoid eggs and restrict the amount of fluid at the noon meal to a single half glass. The patients otherwise eat at will at breakfast and at noon, but they skip the evening meal or at most take a single dish of some vegetable or cooked fruit, no bread. An hour and a half or two hours later a cup of tea is allowed. This mode of dieting is not depressing while it puts an end to the gastro-intestinal intoxication responsible for lack of sleep or restless sleep, nightmares, fetid breath and flatulence. The cure is hastened by taking a teaspoonful of sodium sulphate in a half glass of water on rising. A further measure he insists on is that the patient must not sleep more than eight hours during the twenty-four. Muscular exercises are indispensable and the patients recuperate so rapidly on the above that they soon cease to shrink from exercising. He relates in conclusion a typical case of neurasthenia of the melancholia type with neuralgia, membranous colitis, etc., in a woman of 32 who had been treated for years in the most varied ways—all to no avail, but she was promptly cured by the above course of treatment.

53. **Rôle of the Nervous System in Skin Affections.**—Jourdanet takes as an example occupational eczema or other skin affections, showing how they are liable to break out suddenly on the occasion of some fright or other emotional stress. He cites a number of examples of housewives doing a big washing, in varnishers and others. The conflict or the convergence of the external irritation with one or more internal irritations proves the last straw and the cellular reaction follows. This convergence of irritations, he emphasizes, is a law of general biology that reigns throughout all pathology.

54. **Prognosis of Chronic Nephritis Based on Urea Content of the Blood.**—Widal here presents the valuable record of numerous patients with chronic nephritis to whom the various tests for estimation of the functional capacity of the kidneys have been repeatedly applied in the course of several years. They demonstrate that the mere estimation of the urea content of the blood serum from time to time is a reliable and accurate means of keeping an oversight of the azotemia in chronic kidney disease. The technic is extremely simple. As long as there is no more than 0.5 gm. of urea to the liter, there can be no question of azotemia. When the proportion surpasses this or reaches 1 gm., the

tests should be frequently repeated. When the proportion runs up to 2 gm. he regards the patient as in more danger than many persons with cancer.

Revue Médicale de la Suisse Romande, Geneva

May 20, XXXIV, No. 5, pp. 301-384

56 *Rigidity of the Abdomen. (La défense musculaire et le ventre de bois.) Roux.
57 *Influence of Salvarsan on Syphilitic Meninges. (La séreuse sous-arachnoidienne en regard de la syphilis. Influence du traitement salvarsanique.) Dind.
58 Present Status of Treatment of Paresis. (Les acquisitions récentes dans le domaine de la paralysie générale.) Bonhomme.
59 Induced Pneumothorax. Meyer.

56. **Rigidity of the Abdominal Wall.**—Roux emphasizes the necessity for discriminating between the sudden, circumscribed and transient contraction of the muscles, forming the "muscular defense," and the true and persisting contracture forming the "wooden" abdomen; with the latter the patient seems to be trying to hold his abdomen rigid even against his will, and nothing can simulate or arrest it. The "wooden" abdomen is the extreme degree of the "muscular defense." It imparts no decisive information as to what is going on below, and after an accident to the abdomen it is of no practical importance, as a rule. But when the abdominal wall grows suddenly hard as a board, without an accident to explain this, it suggests intense irritation below, generally of chemical origin, from perforation of the stomach or upper bowel. It was not evident in a number of his cases of spontaneous hemorrhage in pancreas or adrenals and he noticed it only once, and then very slight, with extra-uterine pregnancy, torsion of genital organs, appendicitis and spontaneous rupture of the rectum. As it is the exception which tests the rule, he concludes by reporting a case in which intense pain throughout the abdomen and kidneys and the persisting rigidity of the abdominal walls compelled a laparotomy. Nothing pathologic was found in the accessible organs but the symptoms subsided. Another attenuated attack seventeen days later terminated in the expulsion of three small kidney stones, since which time there has been no further disturbance.

57. **Influence of Salvarsan on Syphilis of Central Nervous System.**—Dind has been examining repeatedly the cerebrospinal fluid in a number of syphilitics in the secondary stage, especially just before, during and following skin manifestations; also in a number two or more years after infection, and in sixteen with paresis, tabes or other affection of the central nervous system. The findings on lumbar puncture in 190 cases demonstrate that the pressure is abnormally high as a rule when there is involvement of the nervous system, and occasionally without such. There is also pronounced lymphocytosis as a rule during the stage of septicemia—evidenced by the exanthem—and also when the nervous system is impaired as shown by ataxia, paresis, intense headache or ictus. In four cases in this last group the findings on repeated lumbar puncture showed remarkable changes for the better under the influence of a course of neosalvarsan. These objective findings, he says, are more convincing testimony than the euphoria presented by the patients, as this is common with almost any new remedy.

Archiv für Gynäkologie, Berlin

CII, No. 3, pp. 411-659. Last indexed April 18, p. 1289

60 *Permanent Cures after Operations for Recurrence of Uterine Cancer. E. Zweifel.
61 Action on Smooth Muscles of Hypophysis Extract from Gravid and Non-Gravid Animals. (Vergleichendes Studium über die Wirkung des Hypophysenextraktes von trächtigen und nicht trächtigen Tieren auf die glatte Muskelfaser.) E. Santi.
62 *Morphology and Functioning of the Ovary in Health and Disease. B. Aschner.
63 Vaginal Myomas. R. Müller.
64 Lack of Inhibitor Reflex Cause of Surprisingly Rapid Delivery with Spinal-Cord Disease. (Ursache des überraschend schnellen Geburtsablaufes bei Rückenmarkserkrankungen.) R. Zimmermann.
65 *Proteolytic Serodiagnosis of Pregnancy. (Bedeutung der Antitrypsinmethode für die serologische Schwangerschaftsdiagnostik.) R. Franz.
66 Uterine Sarcoma Secondary to Infectious Granuloma. T. Nagy.
67 History of Obstetrics in Ancient Rome. (Beiträge zur ältesten Geschichte der Geburtshilfe in Rom.) S. E. Wichmann.

60. **Ultimate Outcome after Operations for Recurrence of Cancer.**—Zweifel reports from the Jena clinic what he thinks is the longest survival on record after an operation for recurrent uterine cancer. Vaginal hysterectomy was done in 1902 and the following year an extensive recurrence was removed by an abdominal operation. The patient is still in robust health, working in the field. The clinic has a record for 1903 to 1909 of twenty-three operations for recurrence, and the outcome to date is known in twenty cases. Five women were operated on twice for recurrence, one three times and another five times. In only 6 was the primary operation vaginal. In 3 cases the supposed recurrence proved to be of another nature. Five of the remaining 17 are free from recurrence to date. One woman developed recurrence seven years after the first operation. The interval in the permanently cured cases is over ten years in two, and over four, five and six in the others, the average being seven and a half years. The woman of 66 operated on five times for recurrence is now 75 and has had no sign of trouble during the last four and a half years. In another case a woman of 44 had to have one kidney and part of the bladder removed in 1903 on account of involvement of the ureter in the recurring cancer. She is in good health to date. The clinic now insists that women should return for regular examination every three months during the first three years. Only about 10 per cent. of the recurrences developed later than this.

62. **Functions of the Ovary.**—Aschner devotes sixty-four pages to this study of the morphology and functioning of the ovaries in normal and pathologic conditions, in various animals and man. He notes that defective development of the ovaries does not modify the sexual characters so strikingly as defective development of the testicles. The relations between the ovaries and the nervous system are twofold: the functioning of the ovaries is regulated by the nervous system and the ovaries regulate both the vegetative and the central nervous system. There is much to sustain the view that some disturbance in the internal secretion of the ovary is responsible for hysteria. By testing for protective ferments according to Abderhalden it may prove possible to control hysteria by organotherapy, reducing or supplementing the functioning of the ovaries by partial castration or giving ovarian extract. Radiotherapy and organotherapy, he thinks, have a future in this field, especially when combined with measures for enteroptosis, etc. Many cases of neurosis can undoubtedly be benefited along these lines, although it is beyond our power to cure constitutional inferiority.

65. **Antitryptic Serodiagnosis of Pregnancy.**—Franz made 223 tests of the proteolytic power of the serum from 47 women at different stages of pregnancy or the puerperium. The serum of 68 women in labor and of 95 in the puerperium was also tested, and of 4 with toxic pregnancy, skin affections or eclampsia. The results are tabulated in detail and compared with the findings in a number of non-pregnant women. All the evidence confirms the fact that the anti-proteolytic property of the serum is very much higher toward the end of a pregnancy than in non-pregnant women. All the affections causing increased absorption of albumin in the body augment the titer still farther. The reaction is not specific at all but it may aid in the diagnosis of pregnancy, especially if the titer of the serum before conception had occurred is known.

A negative reaction, he declares, may be regarded as always excluding the possibility of pregnancy. With a positive reaction, nephritis, cancer, tuberculosis, etc., must be excluded before the reaction can be accepted as a sign of pregnancy. He suggests that sufficient attention may not have been paid to this point in applying the Abderhalden test. The proteolytic test permits, he adds, the positive exclusion of pregnancy in thirty minutes after drawing the 3 or 5 cm. of blood from the patient for the purpose, while the simplicity and ease of the technic commend it still further. The test depends on the digestion of a sodium-

casein solution to the point at which it no longer gives a precipitate with dilute acetic acid. Franz has slightly modified the original Fuld-Gross technic for the purpose, as he describes in detail. (The original technic is given in the new edition of New and Nonofficial Remedies (in press), under the heading "Digestive Ferments: Determination of Tryptic Value.")

Correspondenz-Blatt für Schweizer Aerzte, Basel

XLIV, Nos. 20-22, pp. 609-704

68 Typhoid Epidemic in Zurich District, 1913. R. Frey.
69 *Etiology of Goiter. (Zum Kropfproblem.) T. Dieterle, L. Hirschfeld and R. Klinger.
70 Necropsy Findings in Paratyphoid. (Sektionsbefund bei Infektionen mit Bakterium enteritidis Gärtner.) J. L. Burckhardt.

69. **The Goiter Problem.**—Dieterle and his coworkers assert that Bircher's conclusions as to the incidence of goiter in Switzerland are untenable as they are based on alleged facts which later research has shown to be incorrect. Bircher's statements therefore in regard to the drinking water as a factor in goiters must be disregarded. (His views were briefly summarized in The Journal, March 26, 1910, p. 1094, and discussed editorially Feb. 14, 1914, p. 538.)

Deutsche medizinische Wochenschrift, Berlin

May 28, XL, No. 22, pp. 1097-1128

71 *Treatment of Pulmonary Edema. Grober.
72 *Recurrences of Syphilis in Nervous System under Salvarsan. (Ueber Abortivheilungen und Neurorezidive bei der modernen Syphilisbehandlung.) Werther.
73 *Exercises to Strengthen Expiration in Treatment of Asthma. (Die Summtherapie des Bronchialasthmas.) L. Hofbauer.
74 "Pulsions"-Diverticulum. (Das pharyngo-ösophageale Pulsionsdivertikel und seine Operation nach der Goldmannschen Methode.) W. Albrecht.
75 Tumor in Spinal Dura. Amberger and Schenk.
76 *Alimentary Disturbances in Infants. (Ernährungsstörungen der Säuglinge.) H. Schelble.
77 Latent Tuberculosis in Children. H. Kleinschmidt.
78 Isolated Rupture of the Mesentery. Saalmann.

June 4, No. 23, pp. 1145-1200

79 *Excessive Obstetric Hemorrhage. (Behandlung bedrohlicher Blutungen während der Geburt.) P. Jung.
80 *Deep Roentgenotherapy in Internal Medicine. (Erfahrungen mit der Tiefentherapie in der inneren Medizin.) A. Schittenhelm and F. Meyer-Betz.
81 *Occult Bleeding as Sign of Open Ulcer. (Ueber das Vorkommen und Verhalten der okkulten Blutungen beim Ulcus ventriculi und duodeni.) I. Boas.
82 Duodenal Ulcer Stimulates Stomach Motor Functioning. (Das röntgenologisch Erkennbare beim Ulcus duodeni.) E. Schlesinger.
83 *Importance of Preventive Antitoxin Treatment of Diphtheria. (Diphtheriebekämpfung und Diphtherieprophylaxe.) W. Braun.
84 Salvarsan in Abortive Treatment of Syphilis. E. Hoffmann.
85 Efforts of Organism to Maintain the Normal Alkaline Reaction of the Blood. (Bedeutung der Wasserstoffionenkonzentration des Blutes und der Gewebe.) L. Michaelis.
86 Industrial Disease and Mortality in Hungary. (Die Berufs-Erkrankungs-, Sterblichkeits- und Unfallverhältnisse der ungarischen Industriearbeiter.) H. Pach. Commenced in No. 22.

71. **Pulmonary Edema.**—Grober emphasizes the importance of stimulating the heart action, relieving it of some of its task by venesection in case of the full-blooded, and by revulsion. Expectorants and narcotics are seldom needed as there is already sufficient impulse to cough and the usual accumulation of carbon dioxid in the blood has a narcotic action. These may fail, however, and each case should be studied individually. He gives an illustration of the preferable technic for intravenous injection of digitalis—there is no time to wait for its action by the mouth—and for venesection.

72. **Treatment of Syphilis.**—There is no doubt, Werther declares, that with salvarsan we can cure at least 50 per cent. of all cases of primary syphilis. He urges that in the secondary stages salvarsan should never be given in a single dose and never alone. A two-weeks' course of mercury should precede it to avoid danger of a reaction on the part of the brain; then salvarsan should be given in addition once a week until three or four doses have been taken. With primary syphilis salvarsan should be given boldly (0.6 gm.), he thinks, and without preliminary mercury. These rules are based on what he has learned in his experiences at Dresden. The spirochetes in the secondary stage must not be allowed to get out from under the influence of the specific treatment as the mercury and salvarsan are eliminated, and consequently treatment must be chronic. The courses should be repeated until the Wassermann is permanently negative. When this has been accomplished a brief but intensive "provocation course" should be given, and if the Wassermann still persists negative, the cerebrospinal fluid should be examined and tested for its sterility. All this is practical for private patients and should be done before we can assure the patient that he is cured. It is of course impossible with hospital patients. Werther gives each as he leaves a card record of treatment to date.

Sixteen cases of neurorecurrence are reported. The symptoms ranged from mere headache, vertigo and tinnitus to epilepsy and dementia. These neurorecurrences generally developed about six weeks after the close of the first course of treatment, begun in the early secondary stage; this includes, he says, the phase of the primary stage when the Wassermann becomes positive. Neurorecurrences used to be encountered before salvarsan was heard of, but they seem to occur now more frequently than before. He has had thirty cases of them among his 3,000 syphilitic patients. The salvarsan has no special affinity for the nervous system but the spirochetes have. Any left from the previous courses of treatment settle in the nervous system by preference.

73. **Expiration Treatment of Asthma.**—Hofbauer has devised an apparatus to record the expiration, neglecting inspiration. This stresses the expiration phase of breathing and has been found extremely useful in curing emphysema and asthma. In some of the worst chronic cases a complete cure was realized with no recurrence in the more than three years to date.

76. **Alimentary Disturbances in Infants.**—Schelble remarks that ten years ago his article would have been entitled "Gastro-intestinal disturbances." The progress made since has permitted the various disturbances to be analyzed and the exact cause for each recognized. He classifies them according as the children are normal or constitutionally or structurally inferior. The food, infection and heat are the subsidiary factors, and he discusses each of the above five categories in turn, holding up the clinical picture of each and pointing out the measures to be applied in each. By such analyses it is possible to apply measures that will ensure successes beyond those realized in any other field of medicine. For the constitutionally inferior, it may be necessary to stop breast-feeding or to reduce all kinds of feeding to the minimum in case of exudative diathesis; rachitis calls for reduction of milk as this often has a lime-wasting influence; other food rich in lime should be given, and a mixed diet with phosphorus and cod liver oil; with anemia the iron metabolism is at fault and less milk should be given as this is poor in iron; a mixed diet should be given early, with meat juice. With a tendency to dropsy, lime salts are needed to combat the accumulation of water in the subcutaneous cellular tissue. Congenital neuropathies and psychopathies may reduce the tolerance for any kind of food, but even then careful guidance of breast-feeding may bring the children into a thriving condition.

79. **Obstetric Hemorrhage.**—Jung remarks in the course of this article that with placenta praevia extraction should never follow version immediately unless the os is completely dilated. Otherwise the cervix is liable to tear and this is extremely dangerous with placenta praevia. It nearly always entails severe hemorrhage, and it is almost impossible to suture the tissues. He says of cesarean section with placenta praevia that it must be reserved for institutions. In the home, constriction of the waist with a rubber tube, suspenders or rope, according to Momburg's technic, has often proved a life-saving measure both with placenta praevia and premature separation of the normally situated placenta.

80. **Deep Radiotherapy in Internal Medicine.**—Schittenhelm and Betz give an illustrated description of fourteen cases to

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emphasize the frequent importance of deep roentgenotherapy in lymphemia, lymphosarcoma and cancer. Less benefit was realized in acute leukemia. Most of the patients had been given Roentgen treatment by the older technics previously, and the outcome with the "deep" technic showed the superiority of the latter.

81. **Appreciation of the Importance of Occult Blood with Gastro-Intestinal Ulcer.**—Boas has long been emphasizing the importance of this subject but the last year has demonstrated, he says, that unless blood can be detected in the feces any symptoms suggesting ulcer must come from the complications of the ulcer, adhesions, retraction, etc., as an open ulcer cannot exist without some blood being found in the stool—allowing for the fallibility of all human judgments. The occult blood may not be evident except with the most sensitive tests, and he has found the phenolphthalin test extremely delicate. The one drawback is that the patient has to abstain from meat and fish for eight to twelve days beforehand, but then even the minutest admixture of blood is manifest. This test has shown that occult bleeding is of far greater frequency than hitherto supposed, especially when there are hyperacidity, gastrosuccorrhea, typical tender points or subjective stomach symptoms. The test is so sensitive that after repeatedly determining for several days the complete absence of blood from the stools by the test, ten persons were given from 1 to 3 c.c. of their own blood, obtained by venesection, and stirred into soup. In the following stools the test gave positive findings even with the 1 c.c. of blood, while other technics gave positive findings only with the 3 c.c. The intensity of the reaction in the stools did not always correspond to the amount of blood that had been ingested. Either the hematin was not regularly distributed through the stool or there were inhibitor influences at work. It is possible that many conflicting results can be explained by this.

The scrap of feces is rubbed up with alcohol and 3 to 5 drops of acetic acid and filtrated. Then 10 to 15 drops of the phenolphthalin solution are added and 3 to 5 drops of a 3 per cent. solution of hydrogen dioxid. If blood is present the fluid turns pink or red; if not, it persists yellow or grows yellower. The test is said by Kastle to have proved positive with one part blood in 8,000,000 parts of water. The phenolphthalin solution is an alkaline solution of phenolphthalein reduced by zinc to phenolphthalin: 1 gm. of the phenolphthalein and 25 gm. of potassium hydroxid are dissolved in 100 gm. water and 10 gm. of zinc dust is added. The red mixture is constantly stirred or shaken over a small flame until it is entirely decolored and is then filtered while still hot. A little excess zinc dust helps to keep the solution better. The technic of the test is otherwise that of the ordinary guaiac or Weber test for blood. (It was described in detail in THE JOURNAL, Feb. 18, 1911, p. 546.)

83. **Preventive Antitoxin in Treatment of Diphtheria.**—Braun here presents the results of his systematic campaign for prophylaxis during the last two years. In 1909 only about 20 per cent. of the diphtheria patients reached the hospital within the first thirty-six hours of the disease but the educational propaganda since has improved matters so that last year 60 per cent. were received within this interval. The stormier the onset of the disease the more promptly the sick child is taken to the hospital for treatment, and hence the mortality is no higher in the severe epidemics than under ordinary conditions. He gave preventive injections to the other children in the families and only 1.62 per cent. of the 2,218 developed diphtheria later and mostly in a mild form, with four deaths, while nearly 35 per cent. in the non-treated families developed the disease. His experience speaks further for the assumption that the immunity conferred by the antitoxin lasts a long time, possibly for years. He never witnessed anything suggesting anaphylaxis, even on reinjection of the antitoxin, except an exanthem in two cases and in one of these it was the first time any serum had been injected.

Medizinische Klinik, Berlin

May 24, X, No. 21, pp. 879-914

87 *Connection of Appendix with Disease of Genital Apparatus. J. Fabricius. Concluded in No. 22.
88 Swelling in the Vicinity of the Nose with Nasal Affections. (Schwellungen in der Umgebung der Nase bei Nasenerkrankungen.) A. Blumenthal.
89 Fracture of Vertebrae; Diagnosis and Prognosis. (Wirbelbrüche.) P. Ewald.
90 *Salvarsan versus Mercury. (Statistischer Nachweis der Vorzüge der Salvarsanbehandlung vor der Behandlung mit Quecksilber im Frühstadium der Syphilis.) F. Pinkus.
91 Mud Baths in Treatment of Menstrual Disturbances. (Können Gebärmutterblutungen durch Moorbäder geheilt werden?) N. Cukor.
92 Balneotherapy of Chronic Nephritis. Zörkendörfer.
93 Diagnosis of Heart Insufficiency by Changes in Distribution of Blood during Test Work. (Verwendbarkeit der während der Arbeit registrierten Blutverschiebungen zur funktionellen Diagnostik bei Herzkrankheiten.) F. Meyer.
94 Relation of Bacteria to Movements of Nitrogen. (Beziehungen der Bakterien zum Kreislaufe des Stickstoffs.) W. Wangerin.

June 7, X, No. 23, pp. 961-1002

95 Mutilating Obstetric Operations. (Zerstückelnde geburtshilfliche Operationen.) W. Zangemeister.
96 Indications with Calculi in Upper Urinary Passages. (Therapeutische Indikationen bei Steinerkrankungen der oberen Harnwege.) P. Janssen.
97 Post-Diphtheric Polyneuritis Cured by Tonsillectomy. G. L. Dreyfus and J. Schürer.
98 *Friedmann's Remedy. (Ueber Erfahrungen mit dem Friedmannschen Tuberkuloseheilmittel.) B. Scholz.
99 The Seashore in Treatment of Surgical Tuberculosis. (Thalassotherapeutische Erfolge.) Häberlin.
100 Effect of Thermal Baths on Circulation. (Verhalten des Circulationsapparats bei natürlichen kohlensäurehaltigen Thermalsolbädern.) J. Strasburger.

87. **Relations between Appendix and Disease of Genital Apparatus.**—In this review of his experience Fabricius remarks that in two cases he found the appendix soldered to the left ovary and tube and once to the umbilicus. In the latter case there was a tuberculous process in the appendix. In a boy of 12 the appendix was soldered to the testicle. Criminal abortion with perforation of the uterus and secondary appendicitis caused death in one of his two cases of this kind. In several cases of supposed acute appendicitis the trouble proved to be merely the localization in the appendix of a general typhoid infection or of enteritis. In a large group of cases of supposed acute appendicitis, the normal temperature, pulse up to 140 and signs of anemia corrected the diagnosis to ruptured extra-uterine pregnancy. In 6 out of 200 cases of the latter, there was concomitant acute disease in the appendix. The probabilities are in favor of acute appendicitis when the temperature is high and the extra-uterine pregnancy ruptures secondarily to this. A tendency to extra-uterine pregnancy and disease of the adnexa is often entailed by appendicitis, even when mild, and a tuberculous process in the appendix region is responsible for many a chronic appendicitis. The slight rise in temperature in the afternoon is seldom traced to this, its true cause. In one case a young woman's appendix was removed for acute trouble, and a year later the right ovary developed a tuberculous process.

90. **Salvarsan versus Mercury.**—Pinkus is chief of the service giving specific treatment to prostitutes at Berlin and it is said to have been the experiences here which inspired Dreuw to his recent attack on salvarsan. Dreuw stated that the results under the old mercury were better than at present. To this Pinkus replies that recent reexamination of 1,000 prostitutes who had been given mercury treatment years before showed a positive Wassermann in over 80 per cent. and tertiary manifestations in over 50 per cent. which he regards as the complete *Fiasko der symptomatischen Hg-Behandlung*. Comparing the patients with recent primary syphilis treated with and without salvarsan, he found that 84 per cent. of 100 in the latter class had further manifestations during the first year, while this was true of only 69 per cent. of 174 given salvarsan treatment. Among 300 syphilitics in his private practice, 81 per cent. of 250 given mercury alone had further manifestations during the first year, but only 35 per cent. of 50 given salvarsan alone or

with mercury. It is impossible to compile such accurate records for prostitutes as they are given treatment only when manifest symptoms develop.

98. **Friedmann's Remedy.**—Scholz reports from Frankfurt twenty cases of pulmonary tuberculosis given the Friedmann treatment with no benefit in any instance. All reacted to the *Simultaninjektion* with high fever and severe malaise, slight cyanosis and headache preventing sleep. In four cases the disease continued a rapidly progressive course; one lost four pounds and in another patient with surgical tuberculosis a new process developed in the foot under the treatment. He remarks in conclusion that the injections of the Friedmann remedy are in various directions dangerous and even in cases without direct injury to the patient they are frequently followed by right annoying phenomena. He consequently wishes to be classed with those who warn urgently against further application of the remedy.

Therapie der Gegenwart, Berlin

June, LV, No. 6, pp. 241-288

101 *Importance of Repeated Examination of the Sick. (Ueber fortlaufende Krankenbeobachtung.) E. Neisser.
102 Salvarsan in Scarlet Fever; Forty-Seven Cases. Lenzmann.
103 *Treatment of Tuberculous Laryngitis by the Pfannenstill and Friedmann Technics. W. Sobernheim.
104 *Pulmonary Tuberculosis in Children. H. Vogt.
105 *Friedmann's Remedy in Surgical Tuberculosis. R. Mühsam and E. Hayward.

101. **Repeated Examinations.**—Neisser has made a point for three years of keeping patients under prolonged observation at the Stettin hospital. His method is to keep an alphabetical record of the interesting internal cases. One of the nurses keeps a calendar with the names of these patients entered at various dates, and she sends to each when she comes to his name a printed notice asking him to return to be examined and advised. No treating is done, but the patients realize that an interest is taken in them and that it is to their benefit to return and be examined anew. The prosector of the institution also keeps an alphabetical record of all those under this continuous examination in the institute. Of the 126 patients thus registered and reexamined in the last three years, only 11 failed to appear in response to the notice. Neisser hopes in this way to throw light on the connection between the tonsils and recurring articular rheumatism, on the true significance of albuminuria, on what becomes of those with anacidity, and on similar problems. The plan requires the collaboration of only the chief of the service and one nurse until the case comes to the prosector.

103. **Friedmann's Remedy.**—Sobernheim reports thirteen cases of tuberculous laryngitis treated by the Pfannenstill two-route method—potassium iodid taken internally with ozone or hydrogen dioxid applied locally—the aim being to generate a chemical reaction in the diseased tissues. He was not favorably impressed with the results in these cases but the method proved very useful in two cases of lupus of the nasal mucosa, a complete cure being obtained in both cases after a few weeks. He applied the Friedmann remedy in four cases of laryngeal tuberculosis; one patient died, one required an operation later and in the others the disease has progressed. The treatment is qualified as having completely failed in these laryngeal cases.

104. **Pulmonary Tuberculosis in Children.**—Vogt remarks that it is a tendency of the day to pay far greater attention to treatment than to conscientious testing of what is accomplished by our treatment. He says that experience has shown that induced pneumothorax is quite effectual for young children, even when both lungs are involved if the other side is not too extensively diseased. He regards the pneumothorax treatment as the most important and reliable measure at our command for severe and progressing cases in children. It is rarely applicable for infants as the disease generally spreads too rapidly to other organs, but with older children we may be able with it at least to prolong life for years. Time alone will tell whether the cure is permanent. He does not consider that there is any testimony to date that tuberculin treatment is really effectual for pulmonary tuberculosis in children. There is no evidence to date that any animals have been cured by tuberculin. He agrees with Czerny that the results of tuberculin treatment do not surpass in any respect those obtained without it.

105. **Friedmann's Remedy.**—Mühsam and Hayward report from the Moabit Hospital at Berlin 15 cases of surgical tuberculosis given Friedmann treatment, including 5 children. In 10 cases no benefit was apparent; in the 5 others the progress was favorable but whether to attribute this to the injections or to the other measures applied is a question. The only case in which the serum seemed to benefit was in tuberculous peritonitis in a child, and of course it is impossible to ascertain the actual pathologic-anatomic conditions in the peritoneum. Most of the patients suffered materially from the direct consequences of the injections and their general health became impaired. Some of them developed hematuria, diarrhea and eruptions. Their final conclusion is that the Friedmann remedy is unadapted for and ineffectual in the treatment of surgical tuberculosis. They give full details of their 15 cases.

Wiener klinische Wochenschrift, Vienna

May 28, XXVII, No. 22, pp. 741-784

106 Induced Transient Albuminuria. (Auslösung transitorischer Albuminurien beim Menschen.) A. Schiff.
107 Experiences with Treatment of Uterine Myoma. R. Marek.
108 *Habitual Dislocation of the Patella. H. Lorenz.
109 Myomas of Esophagus and Cardia. M. Milovanovic.
110 *Hexamethylenamin Urine Reaction. S. Grosz.

108. **Habitual Dislocation of the Patella.**—Lorenz took a tuck in the capsule according to Mikulicz' technic. This shortening of the capsule proved a simple procedure and a complete success. It is not even necessary to open the joint as the fold can be taken up and sutured without direct inspection. One case is reported in detail.

110. **Reaction from Hexamethylenamin.**—Gross states that in testing the urine for minute amounts of albumin by Freund's method, he noticed a fine-grained sediment in a number of cases and investigation always revealed that these persons had been taking hexamethylenamin. This is proving a sensitive test for the presence of hexamethylenamin. He adds to the urine enough 10 per cent. acetic acid or hydrochloric acid to bring the total to five-fourths or four-thirds of the original amount. Then he adds, a drop at a time, a saturated aqueous solution of mercuric chlorid (about 7 per cent.), continuing this as long as the fluid continues to grow more turbid. He adds that the presence of free formaldehyd in the urine is best evidenced by the inability of micro-organisms to proliferate when the urine in question is inoculated with bacteria and kept at 37 C.

Zeitschrift für klinische Medizin, Berlin

LXXX, Nos. 1-2, pp. 1-216. Last indexed May 9, p. 1516

111 Estimation of Diabetic Acidosis by Determination of Carbon-Dioxid Tension in the Air in the Lungs. L. S. Fridericia.
112 Determination of Acidosis and Its Clinical Availability in Diabetes. M. Lauritzen.
113 Modified Technic for the Blood-Count Apparatus. (Eine Modifikation der Hayemschen Lösung.) G. Jörgensen.
114 Orthodiagraphy for Controlling Action of Digitalis in Therapeutics. W. Libensky.
115 Landry's Paralysis; Fatal in Eight Days. M. Chanutina.
116 *Typhoid Bacilli in the Blood. (Ergebnisse der bakt. Blutuntersuchung in 50 Fällen von Abdominaltyphus.) S. Saski.
117 Tubercle Bacilli in the Blood-Stream and Inoculation of Animals. F. Klemperer.
118 *The Manifold Symptoms of Uremia. (Zur Klinik und Einteilung der Urämie.) E. Reiss.
119 Transfusion of Blood with or without Its Serum Content. M. Levy.
120 Abnormal Proliferation of Myeloid Tissue Without the Blood-Picture of Leukemia. (Die generalisierte aleukämische Myelose und ihre Stellung im System der leukämischen Erkrankungen.) H. Hirschfeld.
121 *Availability of Different Sugars for Testing Liver Functioning. (Bedeutung der verschiedenen Zuckerproben für die Beurteilung der Leberfunktion.) F. Wagner.
122 *Objective Signs of Neurasthenia. O. Schellong.

116. **Typhoid Bacilli in the Blood.**—Saski found typhoid bacilli in the blood during the first week of typhoid fever in nearly all the fifty patients examined. They disappeared

from the blood in the following weeks in most of the cases, but in some, including some mild cases, they could be found in the blood all through the fever period. The findings during the first week were positive in larger numbers of cases than the agglutination test, but after the first week the proportion was reversed.

118. **Uremia.**—Reiss discusses in this first installment of his article the asthenic and epileptiform types of uremia, giving a detailed history of six cases of the former and two of the latter. The first type is distinguished by drowsiness, apathy, increasing lassitude and possibly sudden death from heart failure. The metabolic findings show defective elimination of substances through the kidneys, and loss of power of concentration, inhibition of the diluting power of the blood-serum, increased residual nitrogen and higher osmotic tension in the blood. There may be headaches, vertigo, vomiting and pruritus, but the clinical picture is dominated by the progressive weakening in body and mind.

The other type is distinguished by epileptiform convulsions; they return periodically with exacerbation of the nephritis and subside as the nephritis improves and likewise under potassium bromid. The mind is unimpaired during the intervals between attacks, and no appreciable modification of the urine or composition of the blood is apparent. No influence from change of diet can be detected in this form of uremia. In one of the cases reported no benefit was observed even from restriction to tea and sweetened water, but the tendency to convulsions was promptly arrested by potassium bromid. The patient was a man of 43 with kidney disease for four years. In the last year he had had three attacks of convulsions; they resembled in nearly every respect an epileptic seizure with unconsciousness for five to fifteen minutes.

121. **Alimentary Sugar Test of Liver Functioning.**—The findings in 196 cases are compared, with tabulation of the details, all testifying, Wagner asserts, to the great importance of galactosuria for the differential diagnosis of liver diseases. It indicates functional derangement, and generally of the entire parenchyma of the liver. It differentiates between catarrhal jaundice and other forms of jaundice, especially that with gall-stones and disease of the gall-bladder. The only restriction to be made is that in the jaundice in the second stage of syphilis there is the same response as with simple catarrhal jaundice. The levulose test proved far less exact and reliable in his experience than the galactose test. No connection between alimentary dextrosuria and liver affections was discovered in his research. He found that the sensitiveness of the galactose test could be materially enhanced by using with it Liebig's meat extract. Alcohol, especially brandy, taken in large amounts with or before the galactose, reduced very much the tolerance for galactose.

122. **Signs of Neurasthenia.**—Schellong discusses the exaggerated knee-jerk, vasomotor reddening, tremor of the eyelids, tongue and fingers, and acceleration of the pulse as objective indications of neurasthenia. He has been examining for these signs in hundreds of healthy persons and found each of them in from 25 to 65 per cent. of those examined. A pulse of 88 and over was evident in 37 per cent. of 1,300; tremor of the eyelids in 64 per cent. of 524, and exaggeration of the knee-jerk in 65 per cent. of 800. None of these signs indicates neurasthenia, but when several are noted in one person instability of the nervous system is beyond question, but this does not necessarily mean neurasthenia. The knee-jerk and tremor of the lids are the least significant of the above.

Zeitschrift für Urologie, Berlin

May, VII, No. 5, pp. 353-432

123 Modern Tests of Functional Capacity of the Kidneys. (Nierenfunktionsprüfung.) R. Bauer and P. Habetin.

124 *Disturbances in Urogenital Functioning with Disease of the Posterior Urethra, Especially of the Colliculus Seminalis. J. Leyberg.

124. **Urogenital Disturbances with Irritation in the Posterior Urethra.**—Leyberg gives a colored plate of the endoscopic findings in four cases. They cleared up a long puzzling syndrome which included various urogenital disturbances, even impotence in some of the cases. There was a history of abnormal sexual habits, coitus interruptus, etc., in every case, evidently entailing an irritable condition in the verumontanum. This in turn may induce psychic impotence, and correction of the local affection may have to be supplemented by psychic treatment. But the latter alone is sure to fail, while once convinced of the local cure the mind of the patient is at rest and a complete cure often follows without further psychotherapy.

The symptoms in one case, after eight years of coitus interruptus, were periods of erections and unduly frequent desires to urinate during the day, with smarting and itching. The man of 40 was otherwise healthy and with a healthy family. A six-weeks' course of irrigation treatment for the assumed catarrhal affection gave no relief; endoscopy then revealed extreme congestion and swelling of the colliculus and numerous papillomatous excrescences. They were destroyed with the actual cautery under local anesthesia, and the region was cauterized ten days later with 20 per cent. silver nitrate. Two weeks later the still very large colliculus was cauterized anew with the actual cautery. The posterior urethra was rinsed out every second day through the course with 1 per ten thousand silver nitrate, and normal conditions were completely restored at last in every respect.

Zentralblatt für Chirurgie, Leipsic

XLI, Nos. 20-21, pp. 841-928

125 High-Curving Laparotomy Incision. (Der bogenförmige Bauchschnitt in Epigastrium.) Drüner.

126 Advantages of Resection of Cancer of the Cardia from the Rear. (Die Radikaloperation des Karzinoms der Cardia und des abdominalen Oesophagus.) H. Boit.

127 *Direct Implantation of Nerve in Muscle and Neurotization of Muscle Corrects Paralysis of Trapezius. (Direkte Nervenimpflanzung in den Muskel und muskuläre Neurotisation bei einem Falle von Cucullarislähmung.) V. v. Hacker.

128 Improved Technic for Plaster Bandage with Hare-Lip Operation. (Zweckmässige Modifikation des Heftpflasterverbandes bei Hasenschartenoperationen.) R. Hagemann.

127. **Neurotization of Paralyzed Muscles.**—Hacker reports most excellent results in a case of complete paralysis of the trapezius muscle consequent on injury during an operation on tuberculous lymph-nodes in the neck. He implanted the central stump of the spinal accessory motor nerve in the midst of the paralyzed trapezius muscle, and also implanted the nerve entering the margin of the muscle in a lengthwise slit in a nerve of the plexus. Supplementary to this he sutured together the intact levator ang. scap. and the paralyzed trapezius. The patient has gradually recovered almost perfect functional control of her arm, confirming the practicability and success of these methods of neurotization of a paralyzed muscle.

Zentralblatt für Gynäkologie, Leipsic

XXXVIII, Nos. 20-21, pp. 713-792

129 *Medicolegal Differentiation of Maternal and Fetal Blood. (Ist die Unterscheidung mütterlich en und fötalen Blutes nach neueren Methoden möglich?) W. Vollhardt.

130 Changes in Ovary under Radiotherapy. J. Schiffmann.

131 Abdominal Operations for Uterine Cancer. (Abdominale Radikaloperation des Gebärmutterkrebses nach dem Material des Obuchow-Frauenhospitals.) L. A. Kriwsky.

132 Laceration of the Perineum. (Sekundärnaht bei kompletten Dammrissen.) S. R. Rosenstein.

129. **Medicolegal Differentiation of Maternal and Fetal Blood.**—Vollhardt states that he was unable to obtain decisive findings with the Abderhalden reaction applied to blood that was not fresh and sterile or to hemolytic serum or extracts of blood-stains, not even with the Corin and Welsch modification. This method is therefore not practical for medicolegal purposes in this line. But he found the Neumann and Herrmann test extremely reliable, so much so that negative findings speak positively for child's blood. This technic is based on the constant increase in the fat and lipoid

content of the blood during pregnancy. In the new-born the lipoid content is far below the normal standard. There is much to suggest that increased lipoidemia is connected in some way with the functioning of the ovaries. Vollhardt applied this test to 500 specimens of retroplacental and umbilical-cord blood, drying them on linen protected from the sunlight. An alcoholic maceration of the separate spots was then treated with water or acid and the maternal blood always grew turbid while the child's blood mixture was always limpid or only faintly opalescent.

Gazzetta degli Ospedali e delle Cliniche, Milan

XXXV, Nos. 56-64, pp. 585-680

133 Total Gangrene of Kidney from Phlegmonous Perinephritis. P. Azara.
134 Extraperitoneal Suspension of Uterus to Cure Prolapse. G. Frattin.
135 Possibility of Making a Collateral Outlet for the Parotid Gland into the Submaxillary Gland. G. Ferrarini.
136 Three Children in One Family Taken with Severe Typhoid the Same Day. E. Tognoli.
137 Much's Granula a Hibernating Form of Tuberculosis Virus. S. Mircoli.
138 Favorable Experiences with Antityphoid Vaccination in Italy. G. Collina.
139 *The Urochromogen Reaction. (Valore e natura della reazione urinaria di Weisz.) D. P. Tuliato.
140 *Tetanus Antitoxin in Prophylaxis. (Efficacia delle iniezioni contemporanee di siero antitetanico nella profilassi del tetano.) G. Tizzoni.

139. **The Urochromogen Reaction.**—Tuliato has been studying Weiss' potassium-permanganate reaction and found it positive in 67 per cent. of all the cases of various diseases which terminated fatally. It is not specific for any one disease, but is a sign of the gravity of the condition indicating a fatal outcome if it persists constant and intense. He explains it as due to oxidation of albuminoid substances originating in the decomposition of cells under the direct or indirect action of pathogenic germs. (Compare article in The Journal, June 13, 1914, p. 1886.)

140. **Tetanus Antitoxin in Prevention.**—Tizzoni states that tetanus antitoxin has abundantly proved its efficacy as a preventive in the recent Italian campaigns in northern Africa. The only question now is one of dosage, and this depends on the antitoxin units in the separate specimens. They may vary widely in this respect even in the same makes. The manufacturers should specify on each vial the exact unit content. In the cases in which the dose was too small to ward off the tetanus entirely, it proved exceptionally mild in his experience.

Policlinico, Rome

XXI, Nos. 19-20, pp. 669-740

141 Disturbances from Diverticulum of Meckel; Three Cases. V. Craglietto.
142 Neosalvarsan in Progressive Paralysis; Five Cases. V. Massarotti.
May, Surgical Section, No. 5, pp. 205-256
143 Indications for Tardy Extraction of Bullets from Skull. (Estrazione tardiva dei proiettili dall'interno del cranio.) G. Mingazzini and R. Alessandri.
144 Plastic Operations to Close Defects in the Dura. (Omioplastiche della pachimeninge.) L. C. Zapelloni. Commenced in No. 4.
145 Wounds of Vertex by Way of the Base of the Skull. (Sulle ferite da punta dell'encefalo attraverso la base del cranio.) S. Solieri.

Riforma Medica, Naples

May 23, XXX, No. 21, pp. 561-588

146 *Functional Disturbances in the Pancreas. (Ricerche sulle alterazioni funzionali del pancreas.) S. Fichera.
147 Jaundice from Pressure of Echinococcus Cyst in the Liver. O. Finzi.

146. **Disturbances in Pancreas Functioning.**—Fichera reviews the technic of and the findings with various means for testing the functional capacity of the pancreas. The list is a long one but none seems to be reliable. We have no means to date for correct estimation of the functional condition of this organ, and we can judge of it only by comparing the results of various tests.

Brazil-Medico, Rio de Janeiro

May 8, XXVIII, No. 18, pp. 173-182

148 Syphilitic Arthritis. N. Barbosa.

Semana Medica, Buenos Aires

XXI, Nos. 15-18, pp. 793-1004

149 Action of Artificial Organic Stains on Diastasic Hydrolysis of Albuminoids. (Influence de la concentration des solutions de colorants acides et basiques sur la protolyse de l'albumine par la pepsine dans un milieu acide.) H. Damianovich and L. Guglialmelli.
150 *Sanitary Regulation of Railroad Transportation. (Reglamentacion de la higiene en los ferrocarriles.) M. S. Ortiz.
151 Difficulty of Diagnosing Glaucoma under Certain Circumstances. J. S. Fernandez.
152 Spectrum and Crystallization of the Blood. (Nueva tecnica para la espectroscopia y cristalografia sanguinea.) Maestre and A. Lecha-Marzo.
153 Present Status of Treatment of Ozena. J. C. Correa.
154 Natural and Synthetic Organic Bodies. P. J. Pando.
155 Chorio-Epithelioma. P. S. Mimbela.
156 *Diagnostic Import of Diastase Content of Urine. E. Mariño.
157 Polar Cataract. J. M. Zubizarreta.
158 Regulations Proposed for Industrial Hygiene. J. M. Obarrio.

150. **Sanitary Regulation of Railroads.**—The official decree regulating in Argentina the hygiene of trains, transportation of the sick, of animals and foodstuffs, and the hygiene of employees is here given in full. The regulations are very progressive and are as suggested by Dr. J. Penna, chief of the National Board of Health.

156. **The Starch-Digesting Ferments in the Urine as Aid in Differentiating.**—Mariño has been studying the elimination of diastase in the urine in the course of kidney and pancreas disease and diabetes, following Wohlgemuth's technic. In health the figure ranges from 25 to 100 units, but with nephritis and diabetes the diastase content is much below these figures. With pancreas disease, especially necrosis of the pancreas, an excessively large amount of diastase is eliminated in the urine. With pernicious anemia and with secondary anemia the proportion is also subnormal. The test is made with a 1 per cent. solution of starch and a set of test-tubes with progressively diluted urine. In 19 cases of diabetes the figure ranged from 0 to 12.5 units with a single exception in which it reached 25; this case was distinguished further by the rapid recovery of the patient. In 32 cases of nephritis the figure ranged from 6 to 12.5 and 25 in six cases and 50 in two. In the eleven cases of pernicious anemia the range was from 6 to 12.5 in all; and in twenty-five cases of secondary anemia from 6 to 12.5, with a few reaching 25.

In the case of a woman of 38 with acute necrosis of the pancreas the figure reached 200, as also in a case of cancer of the pancreas in a man of 66. The pancreas affection was diagnosed by this excessive diastase content in the urine in this latter case. In two cases of sclerosis of the pancreas, without complete obstruction of the outlet, the figure was 100.

Hospitalstidende, Copenhagen

May 20, LVII, No. 20, pp. 609-672

159 Glaucoma and Prophylaxis. (Om Aarsag og Opstaaelsesmaade for det saakaldte Glaukoma malignum og om Midler til dets Modvirkning.) C. F. Heerfordt.

Ugeskrift for Læger, Copenhagen

May 14, LXXVI, No. 20, pp. 911-970

160 *Hour-Glass Stomach. (Om Timeglasventrikler.) T. E. H. Thaysen.

160. **Hour-Glass Stomach.**—Thaysen says that repeated roentgenoscopy will reveal that spasmodic contraction of the stomach is responsible for disturbances far more often than generally credited. The apparent stenosis or constriction may be then seen subsiding and returning, instead of the persisting condition otherwise assumed from the findings at a single examination. Four cases are described and illustrated of this intermittent hour-glass stomach. In a further series of six cases the hour-glass contraction was the work of adhesions or cicatricial retraction. Treatment of course is that for gastric ulcer; if not very pronounced, as the ulcer heals the spasmodic contraction will cease. But with organic persisting hour-glass contraction there is little hope of improvement from any but surgical measures. This can be insisted on with greater emphasis as ulceration is almost inevitable in an hour-glass stomach sooner or later.

PROCEEDINGS OF THE ATLANTIC CITY SESSION

MINUTES OF THE SIXTY-FIFTH ANNUAL SESSION OF THE AMERICAN MEDICAL ASSOCIATION, HELD AT ATLANTIC CITY, JUNE 22-26, 1914

HOUSE OF DELEGATES

First Meeting—Monday Morning, June 22

The House of Delegates met in the Solarium of the Traymore Hotel and was called to order at 10:10 a. m. by the President, Dr. John A. Witherspoon, Nashville, Tenn.

The preliminary report of the Committee on Credentials was called for.

Dr. D. Chester Brown, Connecticut, Chairman, reported that the Committee on Credentials had seated seventy-one delegates who had presented credentials which conformed to the rules of the House. (During the morning meeting twenty-three additional members were seated.)

Dr. Dwight H. Murray, New York, moved that the report be received and the accredited delegates be seated as members of the House of Delegates.

Motion seconded by Dr. G. Lane Taneyhill, Maryland, and carried.

The roll recorded seventy-three delegates in attendance.

On motion of Dr. Arthur T. McCormack, Kentucky, duly seconded, the reading of the minutes of the sixty-fourth annual session was dispensed with and approved as published.

The President asked the indulgence of the House, saying that he would make no formal address as he had just risen from a sick bed to come to the meeting. He expressed his appreciation of the work done by the House, however, and of the honor done him in electing him to the presidency.

Reference Committees

He then appointed the following reference committees:

SECTIONS AND SECTION WORK

Hugh Cabot.....Massachusetts
Melville Black.....Section on Ophthalmology
W. T. Mulligan.....New York
J. A. Koch.....Illinois
F. C. Warnshuis.....Michigan

RULES AND ORDER OF BUSINESS

G. Wythe Cook.....District of Columbia
C. H. Beecher.....Vermont
William R. Tipton.....New Mexico
G. Lane Taneyhill.....Maryland
G. V. I. Brown.....Section on Stomatology

MEDICAL EDUCATION

H. Bert Ellis.....California
Fred Lund.....Section on Surgery
W. H. Sanders.....Alabama
Adolph Koenig.....Pennsylvania
C. D. Shelby.....Ohio

LEGISLATION AND POLITICAL ACTION

E. J. Goodwin.....Missouri
Edwin Walker.....Indiana
Hugh Young.....Maryland
E. J. McKnight.....Connecticut
Holman Taylor.....Texas

HYGIENE AND PUBLIC HEALTH

John W. Kerr.....U. S. P. H. Service
W. S. Lalor.....New Jersey
Morgan Smith.....
.....Section on Preventive Medicine and Public Health
A. M. Harvey.....Illinois
Frank Y. Gilbert.....Maine

AMENDMENTS TO CONSTITUTION AND BY-LAWS

W. A. Jayne.....Colorado
Floyd M. Crandall.....New York
Charles Richard.....U. S. Army
Claude A. Thompson.....Oklahoma
Perry Bromberg.....Tennessee

REPORTS OF OFFICERS

Thomas D. Davis.....Pennsylvania
E. J. Hines.....South Carolina
Robert M. Kennedy.....U. S. Navy
A. R. Mitchell.....Nebraska
Rock Sleyster.....Wisconsin

CREDENTIALS

D. Chester Brown.....Connecticut
Henry L. Elsner.....New York
H. A. Royster.....North Carolina
B. R. McClellan.....Ohio
C. E. Cantrell.....Texas

MISCELLANEOUS BUSINESS

A. T. McCormack.....Kentucky
W. E. Anderson.....Virginia
L. J. Hirschman.....Michigan
W. C. Lyle.....Georgia
A. W. McAlester.....Missouri

The Secretary presented his report.

Report of the Secretary

To the Members of the House of Delegates of the American Medical Association:

For the year 1913-14, I submit the following report:

MEMBERSHIP

The membership of the various constituent state associations, which constitutes the membership of the Association, according to the records in the Secretary's office, May 1, 1914, is shown in the table on page 30.

FELLOWSHIP

The Fellowship of the American Medical Association on May 1, 1913, was 37,913. During the past year, 344 Fellows have died, 1,553 have resigned, 491 have been dropped as not eligible, 457 have been dropped for non-payment of dues and 29 have been removed from the rolls on account of being reported "not found," making a total of 2,850 names to be deducted from the Fellowship roll. There have been added 5,990 names to the Fellowship roll, of which 4,416 were transferred from the subscription list. The Fellowship of the American Medical Association on May 1, 1914, was 41,029, a net increase for the year of 3,116.

This gain in the number of Fellows is due largely, as in previous years, to circularizing subscribers to THE JOURNAL who were eligible, urging them to become Fellows.

AD INTERIM COMMITTEE CHANGES

Since the last meeting of the House of Delegates, June 19, 1913, the following appointments have been made by the President:

Committee on Mode of Commemorating the Completion of the Panama Canal, J. H. White, New Orleans, Chairman, vice Isadore Dyer, New Orleans, resigned. William C. Braisted, U. S. N., vice Presley M. Rixey, U. S. N., resigned.

In addition, the death of Dr. S. Weir Mitchell, chairman of the Committee on Memorial to Medical Officers who Died in the Civil War, leaves a vacancy on that committee.

SECTION ON GASTRO-ENTEROLOGY AND PROCTOLOGY

At the Minneapolis session, the House of Delegates adopted the recommendation of the Reference Committee on Sections and Section Work, endorsing the "formation of a section to be entitled the 'Gastro-Enterologic and Proctologic Section of the American Medical Association' under the following conditions:

"First: That the American Gastro-Enterologic Society and the American Proctologic Society be disbanded and hold their meetings jointly as a section of the American Medical Association to be designated as above.

"Second: We also recommend that the number of papers to be read at any annual session be limited to fifteen."

This section has not been formed, as these conditions were not met. We quote from a letter addressed to the chairman of this Reference Committee of the last house, by Dr. Frank-

lin W. White, secretary of the American Gastro-Enterological Association:

"The American Gastro-Enterological Association was not represented at Minneapolis, and has taken no part as an Association in the movement to bring about the formation of a new Section of the A. M. A.

"A vote of our members was taken by letter this fall with the result that about 90 per cent. are opposed to disbanding."

Constituent Association of	No. Counties in State	No. Component Societies in State Assn.	No. Co.'s in State Not Org'd		No. Physicians in State (6th Ed. Directory)	No. Members of State Association		No. A. M. A. Fellows in State	No. Subscribers to Journal in State*
			1913	1914		1913	1914		
Alabama	67	67	...	...	2,518	1,617	1,760	364	220
Arizona	14	11	4	3	291	139	169	118	60
Arkansas	75	70	9	5	2,652	994	1,255	386	205
California	59	37	21	22	5,353	2,445	2,463	1,831	755
Colorado	63	37	25	26	1,782	740	791	535	225
Connecticut	8	8	...	...	1,630	864	914	512	205
Delaware	3	3	...	...	263	102	99	54	29
Dist. of Columbia	.....	.....	...	...	1,421	587	552	379	311
Florida	50	25	27	25	1,177	353	412	228	221
Georgia	148	86	60	62	3,253	1,106	1,314	493	575
Idaho	33	13	15	20	446	95	116	89	83
Illinois	102	101	...	1	10,286	5,275	6,055	3,917	1,625
Indiana	92	89	4	3	5,001	2,392	2,420	1,115	402
Iowa	99	96	3	3	3,733	1,653	2,019	1,339	346
Kansas	105	81	23	24	2,840	1,370	1,240	689	301
Kentucky	120	116	3	4	3,621	2,250	2,132	688	187
Louisiana	64	39	21	25	2,030	957	962	416	2)
Maine	16	15	1	1	1,200	623	625	314	77
Maryland[1]	23	22	2	2	2,232	1,081	1,089	628	435
Massachusetts[2]	14	14	...	...	5,798	3,450	3,463	1,953	812
Michigan	83	81	4	2	4,180	2,232	2,390	1,469	691
Minnesota	86	83	5	3	2,381	1,426	1,380	1,193	370
Mississippi	79	76	7	3	2,047	875	1,090	279	126
Missouri[3]	114	101	9	14	6,224	2,938	3,160	1,591	521
Montana	33	15	18	20	578	243	260	172	114
Nebraska	93	68	25	25	1,867	832	996	541	262
Nevada	16	3	11	13	155	82	74	59	26
New Hampshire	10	10	...	...	705	502	503	232	49
New Jersey	21	21	...	...	3,012	1,483	1,575	902	305
New Mexico	26	9	11	17	447	175	196	123	63
New York	62	58	4	4	15,301	7,330	7,410	4,430	1,824
North Carolina	100	93	10	7	1,987	1,115	1,130	376	308
North Dakota	50	47	10	3	577	350	345	267	77
Ohio	88	85	...	3	7,912	3,495	3,650	1,959	795
Oklahoma	77	68	5	9	2,612	1,111	1,131	449	195
Oregon	34	31	6	4	1,150	393	442	271	223
Pennsylvania[4]	67	63	4	4	11,611	6,014	6,528	3,930	1,824
Rhode Island[2]	5	6	...	...	761	370	377	271	166
South Carolina	44	37	7	7	1,362	712	728	335	337
South Dakota	65	58	8	7	674	292	304	238	110
Tennessee	96	61	35	35	3,389	1,380	1,453	503	323
Texas	250	175	91	75	6,024	3,059	3,065	1,110	435
Utah	27	9	20	18	446	234	218	161	70
Vermont	14	14	3	...	685	387	353	169	87
Virginia[4]	100	38	...	...	2,420	1,591	1,593	1,110	281
Washington	39	21	19	18	1,644	874	840	571	251
West Virginia	55	43	12	12	1,678	865	915	449	181
Wisconsin	71	70	...	1	2,737	1,700	1,760	1,147	401
Wyoming	23	5	11	17	237	121	120	62	52
Canal Zone	.....	.....	...	...	89	86	75	21	0
Hawaii	.....	.....	...	...	146	73	73	29	7
Porto Rico	.....	.....	...	...	274	.....	151	23	26
Philippine Is.	.....	.....	...	...	745	105	118	29	51
Totals	2,984	2,383	553	547	143,586	70,538	74,235	39,892	17,865
Honorary Fellows and Fellows listed at foreign addresses								71	.....
Fellows in government services								1,068	.....
Journals to foreign addresses, etc.								.....	2,177
Grand totals								41,031	20,042

* Not including Fellows of American Medical Association.

NOTE.—The number of members of the different associations stated in this table is in accord with the membership of the several associations as they were reported to the Secretary on May 1, 1914.

The lack of an effective uniform system for reporting the membership of the state associations accounts for whatever discrepancies this table shows and detracts from the value of the statement.

Component societies are those societies which compose the state association. A component society may include one county or more.

1. The state of Maryland has 23 counties and the city of Baltimore; Missouri has 114 counties and the city of St. Louis.

2. These state associations are divided into district societies, and these are listed in the table as component societies. Some of these districts are smaller and some larger than the county, the county lines being ignored.

3. Provision is made for the physicians in each of these counties to join the component society in an adjoining county.

4. Virginia has recently adopted the plan of organization and is now establishing component county medical societies.

RESOLUTION FROM THE SECRETARIES OF SECTIONS

In accordance with the action taken by the House of Delegates at the Minneapolis meeting a conference of secretaries of the sections of the Association was held at the headquarters in Chicago on Nov. 6, 1913. The day was devoted to a discussion of the work of the Scientific Assembly and on motion the conference requested the House of Delegates to consider the advisability of dividing the sections into two groups—general sections and special sections, the former to include Practice of Medicine, Surgery, Pharmacology and Therapeutics, Pathology and Physiology and Preventive Medicine and Public Health; the second group to comprise the remaining sections, i. e., Obstetrics, Gynecology and Abdominal Surgery, Ophthalmology, Laryngology, Otology and Rhinology, Diseases of Children, Stomatology, Nervous and Mental Diseases, Dermatology, Genito-Urinary Diseases, Hospitals, Orthopedic Surgery—and that Section 13, Chapter 11 of the By-Laws be so amended as to provide that at any annual session of the Scientific Assembly a Fellow shall be privileged to present one paper before a general section and a second paper before a special section.

Preambles and resolutions adopted by the Medical Society of the State of California inviting the American Medical Association and other organizations to arrange for their 1915 sessions to be held in San Francisco are herewith transmitted to the House of Delegates, together with a record of the action of the Medical Faculty of the Leland Stanford Junior University on the same topic.

ACTION OF THE MISSISSIPPI ASSOCIATION

The Mississippi State Medical Association reports through its secretary to the Secretary of the American Medical Association that at its annual session the Committee on Secretary's Report offered the following recommendation which was unanimously passed

We recommend that the secretary be instructed to inform the A. M. A. that the component county medical societies of this state, *and they alone*, will pass on applications for membership in this body.

Preambles and resolutions adopted by the Medical Society of the State of New York recommending an amendment to Section 7 of the Food and Drugs Act are herewith transmitted to the House of Delegates, as is a communication from the Legislative Committee of the Medical Society of the County of Suffolk, conveying preambles and resolutions urging that provisions be made for the mental examination of immigrants.

Respectfully submitted,
ALEXANDER R. CRAIG, Secretary.

Dr. Arthur T. McCormack, Kentucky, moved that the report be received and the various resolutions be referred to the appropriate committees, and the report itself be referred to the Reference Committee on Reports of Officers. Motion seconded and carried.

Dr. Arthur T. McCormack, Kentucky, moved that in the presentation of the published reports the chairmen be asked merely to emphasize the important matters presented in the several reports, rather than to read the reports as published in the Handbook. Motion seconded.

Dr. William L. Noble, Illinois, moved to amend that any additions to the present reports be read.

The amendment was seconded, accepted, and the original motion as amended was carried.

Dr. W. T. Councilman, Massachusetts, Chairman, read the Report of the Board of Trustees, which was referred to the Reference Committee on Reports of Officers.

Report of the Board of Trustees

The past year has been distinguished by no unusual events in the Association; all of the forms of activity by which it serves the medical profession and the public have been marked by successful effort. All Fellows and members of the Association may be proud of the demonstration which its yearly reports give, that the ideal of service to man is dominant in the minds of the medical profession of this country. It is perhaps natural that this ideal of service should dominate medicine for its members know more intimately than the members of other professions the sorrows of man. In pursuance of such ideals, it is natural that animosities should

be excited, for the efforts of the Association oppose the interests of those who prey on humanity. The Judicial Council, the Councils on Medical Education and on Health and Public Instruction, will each present to you a detailed report of their activities.

COUNCIL ON PHARMACY AND CHEMISTRY

Of all the activities of the American Medical Association, none has aroused more antagonism than those connected with the work of the Council on Pharmacy and Chemistry. The publicity department of our pharmaceutical manufacturers and the journals which depend on advertising for their existence are ever ready to find fault with, to condemn and to misrepresent the Council. Nevertheless, it is gratifying to note that there is a gradually increasing appreciation of its aims and objects and what it is accomplishing. The medical profession is slowly but surely appreciating the value of the work and the manufacturers, also, both foreign and domestic, are recognizing that the reports of the Council are authoritative and final, and must be respected. Unfortunately most of the proprietary articles are merely simple mixtures of substances marketed under meaningless or misleading names, and advertised by means of extravagant if not false claims. As few of their products can receive recognition, these firms naturally feel it is to their interest to oppose and ignore the work of the Council. Of course, the real remedy lies in the hands of the medical profession which should refuse to accept and prescribe proprietary preparations on information supplied by those interested in their sale. Still, it is a satisfaction to note that all those firms which have products that really are new and of therapeutic value are asking the Council to pass on them.

While it is difficult to single out any particular activity of the Council as especially deserving notice, the following may be mentioned:

DIABETIC FOODS

Most of these are fraudulent or nearly so and are put out by a number of manufacturers with the view of supplying the demand of physicians for a suitable food in diabetes. An investigation of these by the Council showed that while two or three seemed to come up to the government standard and were reasonably clear as to the carbohydrates, practically none was sold under claims which could be regarded as legitimate. After considerable investigation the Council has admitted two of the preparations to N. N. R., while the product of another concern will soon be accepted. While accepting these, THE JOURNAL has published reports on some of the more fraudulent among these foods. This particular work is of vast importance; it not only protects the doctor, and through him the public, but it is stimulating other manufacturers who want to do right, to bring their products up to the standard required.

RUSSIAN MINERAL OIL

A decided interest in this as a laxative has been excited by the recommendations of Sir Arbuthnot Lane and his followers. The mineral oil used by him is called Russian Mineral Oil and slightly differs from the liquid petrolatum of the U. S. Pharmacopeia. It is probable that as a result of the investigation the Council will, in a report soon to be published, define Russian Mineral Oil and explain to the profession its relation to the liquid petrolatum of this country. It is hoped that in this way a check may be put on the introduction of this preparation as a proprietary under a host of meaningless names, with more or less fraudulent claims as therapeutic agents. It will be a reflection on our profession if such proprietaries already on the market are allowed to exist.

USEFUL DRUGS

The work of the committee on a selected list of drugs has resulted in the publication of the book called "Useful Drugs." This has already been adopted as a text-book by a number of our best schools; its adoption has been considered by the state licensing boards, one already having adopted it, and there is every indication that this enterprise will have a most beneficial effect.

Among other constructive work by the Council is that conducted through its Committee on Therapeutic Research. Under the auspices of this committee a large amount of pharmacologic research work has already been accomplished and much is under way. Eventually this work will result in bringing back into use well-known drugs—non-proprietary preparations that have been swept aside by the commercial propaganda for proprietaries.

Those who are particularly interested should get the annual publication of the Council which is sold for 50 cents a volume. It is to be regretted that more physicians do not take sufficient interest in the Council's work to obtain these and other reports of the Council.

CHEMICAL LABORATORY

Not the least of the enterprises of the Association is the work done in our chemical laboratory. An idea of what is done here can be only a slight degree obtained from the material that is published in THE JOURNAL from week to week. The unpublished work includes examinations made for the Council on Pharmacy and Chemistry, on the results of which often depends the action of the Council; also, a large amount of work is done in connection with our propaganda department, in the investigation of "patent medicines," much of which is never published. Still further, considerable chemical work is done at the request of individual physicians.

During the past year the laboratory force has been increased so that in addition to the director of the laboratory, who is also secretary of the Council, there are now employed three chemists, who devote their entire time to the work.

PROPAGANDA DEPARTMENT

The original purpose for which the Council on Pharmacy and Chemistry was created was to investigate and enlighten the profession concerning, the so-called "ethical" proprietary medicines; that is, those sold through or prescribed by physicians. It was soon found, however, that there was no dividing line between such medicines and the ordinary "patent medicines" sold direct to the public. There gradually developed a demand, on the part of the profession, and later, on the part of the public, for information regarding proprietary medicines. Our attempt to meet this has in course of time so broadened out that it has been necessary to create a new department—the Propaganda Department. This has become one of the most important phases of the Association's work and it is rapidly increasing in scope and extent.

As a type of the work which the Propaganda Department is doing, through THE JOURNAL, the following is worth referring to: Early in the year one Peter P. Duket appeared with a new "cure" for tuberculosis. He would probably have attracted little attention and have done but little harm had he not received the financial support of a prominent politician and the professional support of a Chicago medical college. These two elements gave the man and his "cure" a certain standing in the eyes of the public that otherwise they would never have received. The Propaganda Department had in its files material, in the way of correspondence and advertising matter, that Duket had issued some few years previously. Realizing that the amount of publicity Duket and his "cure" were getting was productive of wide-spread harm, the facts developed up to that time were printed in THE JOURNAL, May 10, 1913. In addition, an investigation was started of Duket's "cure" and the results were published in full in THE JOURNAL for May 24, 1913. In spite of the overwhelming evidence presented by THE JOURNAL in regard to the worthlessness of this vaunted "cure," the professional and financial backers of Duket continued to exploit it. The sequel to this story appeared in THE JOURNAL, April 25, 1914, where it was reported that both the college which had stood sponsor for it and the individual who had furnished the money had come to the conclusion that the Duket "cure" was worthless. Specific attention is called to this case for the reason that no other agency apparently was ready or willing to stand between the

consumptive public that was being deceived and the organized backers of the deception.

This case is but one out of many in which the American Medical Association has spent time and effort in obtaining and disseminating evidence for the protection of the exploited sick, and in nearly every case the Association has been the only source of protection these unfortunates have had. That the public is beginning to recognize this fact is evidenced by the large number of letters we are now receiving from laymen. Five years ago a letter from a layman was such an unusual event as to cause comment; now such are received in nearly every mail. During 1913 there were received and answered over 4,200 such letters of inquiry regarding frauds in medicine, as compared with 2,450 letters received in 1912. Many, if not most of these letters, called for information about more than one product. The data sent out from this department alone, therefore, can be roughly estimated. Of these letters 2,990 were from physicians and 1,213 from laymen, and this does not include the correspondence from the laboratory or from the Council on Pharmacy and Chemistry.

One of the most encouraging features of the work done by the Propaganda Department is the interest it seems to have awakened on the part of the lay magazines and newspapers in censoring the advertisements of a medical or quasi-medical nature that appear in their pages. There is a very evident desire on the part of the better class of lay publications to exclude from their pages fraudulent medical advertisements. A number of such publications are constantly referring to the Propaganda Department for information regarding the different preparations or devices whose manufacturers seek advertising space. Not a few newspapers are submitting medical advertising copy to the Propaganda Department.

This state of affairs contrasts strangely with the attitude of the majority of the so-called independent medical journals. It is but rarely that inquiries come from these publications regarding the character of the advertisements of medicinal products they are carrying. More than once the Propaganda Department has had to advise newspapers against carrying advertisements of certain products that were at the same time being advertised in medical journals—and the advice has been taken. It is an unfortunate fact that the effect of the work against frauds in medicine is more evident in lay than in medical journals; the writer of this report has several times had his attention called to this fact by laymen who sought an explanation for this strange condition.

A national organization of advertising men has established vigilance committees in various parts of the United States to work toward the elimination of fraud in advertising. The Association's publications on frauds in medicine have been placed in the hands of these committees and the chairman of each committee is on our mailing list to receive all new pamphlets dealing with the subject. We have been liberal with these committees, supplying them with material asked for. The committees are doing most effective work, and while the results may not be evident to the average man, they are to those who are watching the progress of events. The stereopticon slides that have been prepared in the Propaganda Department, illustrating various phases of quackery and the nostrum evil, have been ordered by the National Vigilance Advertising Committee for use in lectures before advertising men's associations.

The Propaganda Department is being recognized as a clearing-house of information on the subjects with which it deals. Federal departments at Washington, state health officials, municipal health departments, editors of magazines and newspapers, and in some instances health officials in Europe, Australia, India and other countries have referred to this department for information on medical and medicinal frauds.

Nearly three thousand copies of the second edition of "Nostrums and Quackery" have been distributed during the past year. The fourth edition of "The Great American Fraud" was exhausted early in 1913, and a fifth enlarged edition has been issued. This contains an addition to Mr. Adams' original series, extending from 1905 to 1907, and two of his later articles that appeared in *Colliers* in 1912. More than 1,100 paper bound and 250 cloth bound copies have been sent out during the year. Additional pamphlets on frauds in medicine have been issued during the year, putting into this form matter which later will appear in the next edition of "Nostrums and Quackery." The number of individual pamphlets has increased to a point where it seemed wise to combine them in groups, and such combined pamphlets are now to be had on such subjects as: "Consumption Cure Fakes," "Cancer Fakes," "Deafness Cure Fakes," "Obesity Cure Frauds," and "Female Weakness Cures." During the past year more than 46,000 pamphlets dealing with frauds in medicine have been sold or distributed gratuitously among the laity.

The enormous influence of this work of the Association on both the medical profession and the public is difficult to realize. The great advance in medicine in the past thirty years is that it is becoming scientific. The physician seeks knowledge of the conditions of disease in the individual by all possible methods which may assist in the quest and remedial methods are based on the knowledge so obtained. Necessarily, the investigation of disease led to the study of the social factors which are often dominant, and with this there has been developed that spirit of service and altruism which characterizes to-day the profession of medicine. Never before has medicine so completely possessed the confidence of the public. The Fellows and members of the American Medical Association may feel a just pride in what the Association is doing in upholding and assisting in the upbuilding of the highest ideals of the profession through the work of its various councils.

The work of the Propaganda Department has been very greatly assisted by the interesting character of the literature it has published. The story of vice will always have an interest as well for the virtuous as for the vicious; the virtuous find in it the satisfaction which comes from the exposure of vice in others, the vicious in that they may follow or avoid methods according to the degree of success or failure which attends them. The philosopher also reads with interest for the story tells him much of the ignorance and credulity of man.

PUBLICATIONS

The details concerning the circulation of THE JOURNAL will be found in the addenda to this report. As will be noticed, the average weekly circulation for 1913 was over sixty thousand copies, and there was an actual increase in the regular mailing list of 3,333 over the previous year. During the year 14,087 names were placed on the list and 10,754 taken off. Those dropped include physicians who have died, others who were ineligible to fellowship, voluntary discontinuances and those dropped for non-payment. The increase in the mailing list comes from the extended efforts made during the year to increase the circulation.

While in rough numbers the circulation is 60,000, if we take into consideration the fact that a single copy of THE JOURNAL is often read by two or three physicians, we believe we are making a conservative statement in saying that at least 90 per cent. of the members of our profession who are capable of appreciating THE JOURNAL have access to it.

During the year 1913, 4,298 names were transferred from the subscription to the fellowship list. This large number of transfers was the result of inviting to become fellows those subscribers who were eligible to fellowship. A very large number of those who are now fellows originally took THE JOURNAL as subscribers, and such transfers are continually being made.

It should be understood that the increase in the circulation of THE JOURNAL is not from the voluntary act of individuals. It was accomplished in three ways: through circular letters and sample copies of THE JOURNAL; through agents working on commission, and through agents acting as organizers and working on basis of salary, expenses and commission.

A large proportion of the medical profession of this country are on our mailing list at the present time, and a

much further increase in circulation cannot be expected; in fact, it will take persistent effort to keep it up to the present mark.

ARCHIVES OF INTERNAL MEDICINE

A comparison of the circulation statement of the last two years shows a loss of fifty-two in 1913. The total number of copies printed last year was 30,272—a little less than in 1912. The financial loss for the year was $45.68.

There is every reason to believe that the circulation will continue as at present. The slight loss in one year will be counterbalanced by a corresponding gain in another.

AMERICAN JOURNAL OF DISEASES OF CHILDREN

The circulation of the Children's Journal in 1913 was 2,066—a gain of 188 over the year 1912. The total number of copies printed in 1913 was 27,747; and there was a net loss of $169.32.

The statement made in regard to *The Archives of Internal Medicine*, however, also applies to this publication.

THE DIRECTORY

The American Medical Directory, just off the press, merits a passing notice. It is the Fourth Edition, and as each preceding one has been improved over its predecessor, so also has this edition been improved. One of the new features is an attempt to indicate the specialty, if any, practiced by each individual. The previous edition contained a list, arranged by states and cities, of the members of the various national and special societies. This has been retained, but a symbol now follows the name of the individual to indicate to what societies he belongs. In addition, the specialty is indicated of all those who, while not members of special societies, have designated their desire to be classed as specializing in such and such lines. This, it is believed, will be of value when one desires to learn the standing of a physician.

By the aid of symbols and abbreviations, a large amount of information is included in small space. For instance, the following is a statement concerning one individual as it appears in the Directory, except that "John Doe" has been substituted for the name of the doctor:

> DOE, JOHN M. (b'69)●—Pa.1,'91; (i'91); 931 Chase Ave.; Assoc. Clin. Prof. Oph. Pa.7; (B4, 22); Op *

If this information were written out in full, it would appear like this:

> DOE, JOHN M. Member of his County Medical Society and State Medical Association, Fellow of the American Medical Association, born in 1869, graduate of the University of Pennsylvania, department of medicine in 1891, licensed in Pennsylvania in 1891, residence and office 931 Chase Ave., Associate Clinical Professor of Ophthalmology in the Woman's Medical College of Pennsylvania, Member of the American Ophthalmological Society and the Section on Ophthalmology of the College of Physicians and Surgeons, Philadelphia. Practice limited to Ophthalmology.

"John Doe," it should be emphasized, is not a subscriber to the Directory, nor has he paid to have this information concerning him recorded. This illustrates one of the rules governing the publication of the Directory: It is absolutely non-commercial in every respect, and all individuals are treated alike, whether or not they subscribe for the Directory.

Another point that should again be emphasized is that the information, especially that regarding graduation and licensure, is official and therefore reliable. This is true even of those who are practicing under a degree obtained abroad. Through the state department at Washington and the Consular Service a list of graduates from most of the foreign medical schools has been obtained. However, when an individual claims to have graduated from a foreign school whose list of graduates we have not secured, his statements are verified through the Consular Service.

The approximate cost of the present edition of the Directory is $58,000 to $60,000, and the receipts are estimated at from $54,000 to $56,000; that is, there may be a loss of from between $4,000 and $6,000. However, since all the fundamental facts, the gathering of which has involved great expense, are now obtained, much of this expenditure will in the future be eliminated, so that we may hope soon to be able to issue the Directory without any loss.

We feel confident that those who have received the book and have looked into it must regard it as a credit to the Association, not only from the character of its contents and the information therein given, but also from the mechanical viewpoint. All the work on the Directory, except the binding, has been done in the Association's own building. For the purpose of reducing the bulk, special thin, opaque paper was imported from Belgium.

COOPERATIVE MEDICAL ADVERTISING BUREAU

Concurring in the action of the President, who, in compliance with the direction of the House of Delegates, appointed George H. Simmons, E. J. Goodwin and Will C. Braun a committee on the Bureau of State Medical Journals, the Board of Trustees followed up a plan it had devised prior to the action taken by the House of Delegates establishing this committee and empowering this same committee to act as the agent of the Board.

The Board now reports: The Cooperative Medical Advertising Bureau has been in operation since December 1, 1913. The Board underwrote this enterprise by appropriating the sum of $5,000, or so much thereof as might be necessary for the establishment of this Bureau. Twenty-two state journals are represented by the Bureau. Orders for advertising in these journals to the extent of $9,000 have been secured through the Bureau; and apparently the work is appreciated by the state journals. Business is handled by this Bureau on a commission basis, and it is expected that eventually the Bureau will be self-supporting.

FINANCIAL

A reference to the Auditors' report, which follows as an addendum, will show that the profits for the year 1913 were very near to the vanishing point, viz., $1,191.73. As a matter of fact, the report shows that the present worth on December 31, 1913 was $540,261.58, while on December 31, 1912 it was $541,492.41; so that the present worth on January 1 this year was $1,230.83 less than on January 1 last year. This reduction in actual profits comes from two causes:

First, an increase in General Association Expenses (See Exhibit B). Running back five years these expenses were as follows:

1909	$38,302
1910	40,350
1911	44,841
1912	59,188
1913	79,479

Showing practically a doubling of the General Association Expenses during the last five years, and an increase last year over the preceding one of over $20,000. It should be explained that under the head "General Association Expenses" are included all expenses incurred in conducting the various activities of the Association, aside from the publication of The Journal. For instance, Association expenses (under which come expenses connected with the annual meeting, those connected with the Secretary's office—including salaries, printing, postage, supplies, etc.—section reporting, Trustees' meetings, scientific research, Judicial Council, Section Secretaries' meeting, etc.—see Auditors' report Exhibit B) were $18,084; Council on Health and Public Instruction, $18,465; Council on Pharmacy and Chemistry and the Chemical Laboratory, $13,321; Council on Medical Education, $8,617; Propaganda, $10,509; Therapeutic Research, $1,278; Organization, $9,202. Under the last head, "Organization," are included salaries and expenses paid to organizers in the field, which amount to $8,262.

Second, there was an abnormal decrease in the receipts from fellowship subscriptions, which may be thus explained:

As we have already stated, the great majority of those who are at present on the Fellowship list were originally subscribers. These subscribers commenced taking The Journal at any time during the year and their subscription runs for a year; whereas membership covers the calendar year—January 1 to December 31. Thus the subscription and the Fellowship of the majority of those who previous to becoming Fellows had been subscribers expired on different dates. On Jan. 1, 1913, a general effort was put forth to make these dates uniform. Some 25,000 bills were sent out for a fraction of $5.00; whereas in other years each individual would have been billed for the full amount. It is estimated that in this way there was a falling off in the normal receipts from fellowship dues and subscriptions of some $12,000.

One other fact should be mentioned to explain the apparent falling off in receipts, i. e., there was an unusually large number of sample copies of The Journal sent out during the last few months of the year in soliciting fellowships and subscriptions, and the great majority of the new subscribers and Fellows who entered during the last three months of the year were given to January 1 to remit.

We go into this rather minutely to show that while there was a seeming falling off in the proportionate amount of receipts, it is more apparent than real. There is nothing discouraging so far as this part is concerned. But it is important that we consider carefully before extending in any way the activities of the Association. The Trustees feel that the time has arrived to seriously consider curtailing, rather than increasing, the expenses connected with the work of the Association. The appropriations made at the October meeting of the Board amounted to over $62,000, but this provides for only a part of the Association's expenses—that is, simply for those connected with the various councils and committees; it does not include expenses connected with the Secretary's office, trustees' meetings, organization expenses, propaganda work etc.—and these will probably amount to over $25,000.

On January 1 the cash capital including bonds and certificates of deposit was $140,207. While this might have looked large ten years ago, it is a very small reserve for a business of nearly half a million a year. We do not know what reverses may come; unforeseen circumstances may develop that will bring about a reduction in the circulation of The Journal, thereby affecting its revenue, not only from subscription but also from advertising; financial reverses in the condition of the country, etc., may at any time precipitate financial trouble. While these conditions are not threatening or imminent in any way, we must remember that they can arise. The contest against the social medical legislation in England reduced in a short time a large surplus to a big deficiency in the British Medical Association. The American Medical Association should have a reserve fund of at least $300,000 in order to safely meet reverses that may come. Ten years ago the trustees urged that conservatism in the expenditures of the Association should prevail until it had at least $150,000 reserve fund. If it was thought ten years ago that $150,000 was a conservative reserve fund, certainly with the enormous increase in the actual business of the Association $300,000 is none too much at the present time.

In conclusion, your Board of Trustees will suggest this thought: No other organization is doing as much altruistic work as is the American Medical Association at the present time, for 75 per cent. of the expenditure to which we have been referring is absolutely for altruistic purposes. All this work is made possible by the profits from The Journal. And these profits come from the application of business principles in its management and the fact that the Association finally owns a splendidly equipped modern plant, making it possible to do its printing and publishing at a much lower cost than would be the case under other conditions.

Respectfully submitted,

W. T. Councilman, Chairman. M. L. Harris, Secretary.
Philip Marvel. W. W. Grant.
Philip Mills Jones. Frank J. Lutz.
W. T. Sarles. Oscar Dowling.
Thomas McDavitt.

Addenda to Trustees' Report

SUBSCRIPTION DEPARTMENT

The regular weekly issue of The Journal of the American Medical Association, from Jan. 1, 1913, to Dec. 31, 1913, inclusive, 52 issues, was as follows:

January 4	58,022		July 5	59,625	
January 11	58,488		July 12	59,308	
January 18	58,100		July 19	59,201	
January 25	57,882		July 26	59,201	
		233,392			237,335
February 1	57,983		August 2	59,200	
February 8	57,743		August 9	59,383	
February 15	57,054		August 16	59,137	
February 22	57,102		August 23	60,092	
			August 30	59,121	
		229,882			296,933
March 1	57,222		September 6	59,000	
March 8	57,387		September 13	59,080	
March 15	57,430		September 20	62,829	
March 22	57,561		September 27	58,674	
March 29	58,092				
		287,692			239,583
April 5	57,891		October 4	59,199	
April 12	58,001		October 11	59,322	
April 19	60,372		October 18	59,332	
April 26	62,527		October 25	67,037	
		238,791			244,890
May 3	60,400		November 1	72,193	
May 10	65,421		November 8	68,175	
May 17	60,390		November 15	67,063	
May 24	61,675		November 22	66,000	
May 31	62,445		November 29	61,281	
		310,301			334,712
June 7	59,049		December 6	66,061	
June 14	59,036		December 13	71,080	
June 21	59,300		December 20	68,061	
June 28	59,300		December 27	61,550	
		236,685			266,752
Total					3,156,948
Weekly average					60,710

PERCENTAGE OF PHYSICIANS RECEIVING THE JOURNAL

This table gives the number of physicians (based on the third edition of the American Medical Directory) in the United States, number receiving The Journal and the approximate percentage in each state. Copies to physicians in the United States Army, United States Navy, Public Health Service, etc., omitted.

State	Number Receiving Journal.	Physicians in State 3d A. M. Dir.	Approx. per cent. 3d A. M. Dir.
Alabama	581	2,409	24
Arizona	165	247	67
Arkansas	595	2,580	23
California	2,636	4,764	55
Colorado	780	1,738	45
Connecticut	698	1,562	45
Delaware	72	246	30
District of Columbia	562	1,350	42
Florida	395	973	41
Georgia	805	3,007	27
Idaho	212	420	50
Illinois	5,680	9,885	57
Indiana	1,593	4,979	32
Iowa	1,768	3,658	48
Kansas	1,038	2,635	40
Kentucky	917	3,599	25
Louisiana	689	1,924	36
Maine	430	1,176	37
Maryland	1,008	2,083	50
Massachusetts	2,895	5,631	51
Michigan	1,797	4,095	44
Minnesota	1,576	2,253	70
Mississippi	477	2,003	24
Missouri	2,171	6,025	36
Montana	283	512	55
Nebraska	852	1,777	48
Nevada	98	144	68
New Hampshire	288	704	41
New Jersey	1,205	2,870	42
New Mexico	187	430	46
New York	6,334	14,805	43
North Carolina	576	1,836	31
North Dakota	373	593	60
Ohio	2,804	7,553	37
Oklahoma	697	2,633	26
Oregon	547	1,041	52
Pennsylvania	5,895	11,299	52
Rhode Island	472	751	63
South Carolina	442	1,275	35
South Dakota	353	651	54
Tennessee	860	3,309	26
Texas	1,588	5,829	27
Utah	233	427	55
Vermont	246	679	36
Virginia	789	2,350	34
Washington	845	1,620	52
West Virginia	632	1,634	38
Wisconsin	1,600	2,637	60
Wyoming	116	235	50

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The following table shows the number of Fellows and Subscribers for each year commencing with 1900:

Year.	Fellows.	Subscribers.
Jan. 1, 1900	8,445	4,633
Jan. 1, 1901	9,841	8,339
Jan. 1, 1902	11,107	10,795
Jan. 1, 1903	12,553	12,378
Jan. 1, 1904	13,899	14,674
Jan. 1, 1905	17,570	15,698
Jan. 1, 1906	20,826	17,669
Jan. 1, 1907	26,255	20,166
Jan. 1, 1908	29,382	20,880
Jan. 1, 1909	31,999	18,983
Jan. 1, 1910	33,032	19,832
Jan. 1, 1911	33,540	20,504
Jan. 1, 1912	33,250	21,620
Jan. 1, 1913	37,493	19,863
Jan. 1, 1914	41,203	19,751

During the year 1913 there were 4,298 names transferred from the Subscription to the Fellowship Department. This year also special letters were sent out to subscribers who were eligible to fellowship. Many of them were transferred without any payment as they were already paid in advance. This also accounts for the decrease in the number of subscribers.

The weekly average number of subscriptions for 1912 was 20,130; the average for 1913 was 19,137. This shows a decrease of 993. The number of transfers to the fellowship department will account for this decrease in the average number of subscribers.

TREASURER'S REPORT

Report of the Treasurer of the American Medical Association for the year ending Dec. 31, 1913.

1913

Jan. 2	Balance	Bonds	$40,000.00	
		Certificates of Deposit	90,000.00	
		Checking Account	5,025.44	
				$135,025.44

RECEIPTS

Feb.	8	By Cash	Editor and General Mgr.	$30,000.00	
	8	"	Interest-Certificates	900.00	
	8	"	" Bank Balance	6.62	
April	4	"	" Bonds	400.00	
	4	"	" Certificates	965.01	
	4	"	" Bank Balance	14.74	
June	1	"	" Bonds	671.87	
	5	"	Editor and General Mgr.	10,000.00	
	6	"	Interest Bank Balance	34.03	
July	1	"	" Bank Balance	20.25	
Sept.	15	"	" Certificates	942.50	
	15	"	" Bank Balance	40.61	
Oct.	4	"	" Bonds	400.00	
	25	"	" Certificates	66.66	
Dec.	3	"	" Bank Balance	59.19	
	31	"	" Bank Balance	14.30	
	31	"	" Bonds	962.50	
					$ 45,498.28
					$180,523.72

DISBURSEMENTS

Sept. 15	To Cash-Requisition Editor and General Manager	$15,000.00	
Oct. 25	To Cash-Requisition Editor and General Manager	15,000.00	
Dec. 9	To Cash-Requisition Editor and General Manager	10,000.00	
			$ 40,000.00
Dec. 31	Balance		$140,523.72

SUMMARY OF BALANCE

Bonds	$64,750.00
Certificates of Deposit	70,000.00
Checking Account	5,773.72
	$140,523.72

DAVIS MEMORIAL FUND

1913

Jan. 2	Balance		$ 3,299.43	
July 1	By Interest		45.81	
Dec. 31	"		46.50	
				$3,391.74

DISBURSEMENTS

Jan. 2	To Cash, Model of Bust		$ 200.00	
2	" Pedestal for Bust		45.00	
				$ 245.00
Dec. 31	Balance, Northern Trust Co. Savings Dept.			$3,146.74

W. A. PUSEY, Treasurer.

AUDITOR'S REPORT

MARWICK, MITCHELL, PEAT & CO., CHARTERED ACCOUNTANTS
105 SOUTH LA SALLE STREET
CHICAGO, ILL., Jan. 14, 1914.

To the Board of Trustees of the American Medical Association, Chicago, Ill.

Dear Sirs:

In accordance with your instructions, we have audited the accounts of the American Medical Association for the year ended Dec. 31, 1913, and now submit our report thereon, together with the following statements:

Exhibits
"A" Balance Sheet as at Dec. 31, 1913.
"B" Income and Profit and Loss Account for the year ended Dec. 31, 1913.

Schedules
"1" Bonds owned as at Dec. 31, 1913.
"2" JOURNAL Expenses for the year ended Dec. 31, 1913.
"3" Provision for Depreciation for the year ended Dec. 31, 1913.

We examined the securities representing the investments of the Association, verified the cash on hand by actual count and the cash in banks by certificates from the bankers. The following is a statement of the cash on hand and in banks, apart from the insurance cash fund:

Cash on Hand	$ 473.02
Cash Fund	50.00
Continental and Commercial National Bank	96.55
First Trust and Savings Bank	5,773.72
Total	$ 6,393.29

We also examined the vouchers for disbursements and found the same in order, and made a satisfactory test of the revenue.

The balance sheet submitted herewith, Exhibit "A," is, in our opinion, a correct statement of the financial position of the Association as at Dec. 31, 1913, subject to provision for taxes accrued and for subscriptions paid in advance, less subscriptions and memberships due and unpaid.

The following is a condensed comparative balance sheet as at Dec. 31, 1913 and 1912:

Assets	December 31—1913	December 31—1912	Increase	Decrease
Property and Plant	$337,971.16	$345,613.70	$	$ 7,642.54
Investments	133,813.75	129,063.75	4,750.00	.....
Current and Working	50,804.03	67,722.94	.....	16,918.91
Prepaid Accounts and Reserves	3,807.38	907.84	2,899.54	.....
Medical Directory—Fourth Edition and Biographical	31,050.69	.....	31,050.69	.....
Total Assets	$557,447.01	$543,308.23	$38,700.23	$24,561.45
Liabilities	17,185.43	1,815.82	15,369.61	.....
Surplus	$540,261.58	$541,492.41	$	$ .....

Assets:

Increase	$38,700.23
Decrease	24,561.45
Net Increase	$14,138.78

Liability Increase	$15,369.61
Net Increase	14,138.78
Surplus Decrease	$ 1,230.83

The net income for the period under review is $1,191.73, as shown in Exhibit "B." This amount to the surplus account, and a deduction made for the loss on the Directory—Third Edition—applicable to the year 1912, making the net decrease in surplus $1,230.83, as shown above.

During the calendar year 1913, depreciation to the amount of $14,313.02 has been written off the property accounts, particulars of this amount being recorded in Schedule "3."

The revenue for the year has also been charged with $1,463.17 in respect to bad debts.

EXHIBIT "A"

BALANCE SHEET AS AT DEC. 31, 1913

ASSETS

PROPERTY AND PLANT, AT COST LESS DEPRECIATION:		
Real Estate and Buildings		$257,960.32
Machinery		53,462.88
Type and Metal		9,578.10
Furniture and Fixtures		14,687.50
Laboratory		1,082.36
Library		1,200.00
Total Property and Plant		$337,971.16
INVESTMENTS:		
Bonds at Cost (Schedule "1")	$63,813.75	
Certificates of Deposit	70,000.00	
Total Investments		$133,813.75
CURRENT AND WORKING ASSETS:		
Inventory of Material and Supplies	$22,441.15	
Accounts Receivable:		
Advertising	$17,605.07	
Reprints	894.54	
Miscellaneous	3,077.35	
	21,576.96	
Notes Receivable	392.63	
Cash in Bank and on Hand	$ 6,343.29	
Office Fund	50.00	
	6,393.29	
Total Current and Working Assets		50,804.03
Insurance Fund—Cash in Bank		$ 3,056.97
Prepaid Accounts—Insurance		750.41
Biographical		2,614.41
Directory—Fourth Edition (1914):		
Labor and Material		28,436.28
Total		$557,447.01

LIABILITIES

Accounts Payable		$ 14,758.05
Advance Payments on Publications		2,427.38
Surplus:		
As at Dec. 31, 1912	$541,492.41	
Less: Directory—Third Edition (1912), Balance written off	2,422.56	
	$539,069.85	
Net Income for the year ended Dec. 31, 1913	1,191.73	
Total Surplus		$540,261.58
Total		$557,447.01

EXHIBIT "B"

INCOME AND PROFIT AND LOSS ACCOUNT FOR THE YEAR ENDED DEC. 31, 1913

Journal American Medical Association:

Revenue:		
Membership Dues		$ 40,461.87
Subscriptions		223,832.57
Advertising		188,986.82
Jobbing		3,762.18
Books		3,862.94
Reprints		2,861.91
Buttons		511.14
Miscellaneous Sales		4,060.97
Interest		658.00
Total Revenue		$468,938.40
Expenses:		
Per Schedule "2"	$382,753.71	
Provision for Depreciation—Schedule "3"	14,313.02	
Loss on Bad Debts	1,463.17	
Total Expenses		$398,529.90
Net Revenue		$ 70,408.50

General Association Expense:

Expenses:		
Association		$ 18,084.26
Health and Public Instruction		18,465.14
Pharmacy and Chemistry and Chemical Laboratory		13,321.79
Medical Education		8,617.54
Propaganda		10,509.47
Organization		9,202.68
Therapeutic Research		1,278.17
		$ 79,479.05
Less:		
Interest on Bonds	$2,434.37	
Interest on Treasurer's Account	3,063.91	
Rentals	4,764.00	
	10,262.28	
Net Association Expenses		$ 69,216.77
Net Income		$ 1,191.73

SCHEDULE "1"

BONDS OWNED AS AT DEC. 31, 1913

No. of Bonds	Description	Value—Par	Value—Book
5	Atchison, Topeka & Santa Fe Railway Co. 100 year 4 per cent. Gold Bonds	$ 5,000.00	$ 4,988.75
5	Atchison, Topeka and Santa Fe Railway Co., 100 year 4 per cent. Gold Bonds	5,000.00	4,532.50
5	Baltimore and Ohio Railway Co., First Mortgage 4 per cent Bonds	5,000.00	5,032.50
5	Baltimore and Ohio Railway Co., First Mortgage 4 per cent. Bonds	5,000.00	4,767.50
5	Erie Railroad Co., 100 year 4 per cent. Gold Bonds	5,000.00	4,932.50
5	Reading Company, General Mortgage 4 per cent. Bonds	5,000.00	4,870.00
5	Reading Company, General Mortgage 4 per cent. Bonds	5,000.00	4,732.50
5	Union Pacific Railroad Co., First Mortgage 4 per cent. Bonds	5,000.00	5,267.50
25	City of Omaha Water Works, 4½ per cent. Gold Bonds	25,000.00	24,750.00
	Total	$65,000.00	$63,813.75

SCHEDULE "2"

JOURNAL EXPENSES FOR THE YEAR ENDED DEC. 31, 1913

Wages and Salaries	$142,628.08
Editorials, News and Reporting	11,100.11
Paper	111,244.02
Ink	3,490.27
Electrotypes	5,374.64
Binding	142.09
Miscellaneous Paper	4,304.27
Postage—First Class	15,539.61
Postage—Second Class	26,167.27
JOURNAL Commissions	9,899.94
Collection Commissions	4,213.01
Discounts	3,216.09
Express and Cartage	2,366.32
Exchange	1,471.12
Office Supplies	490.82
Telephone and Telegraph	750.01
Office Jobbing	3,579.32
Miscellaneous	7,068.64
Power	$ 2,651.97
Light	940.95
Fuel	2,522.39
Factory Supplies	4,226.68
Insurance and Taxes	4,567.58
Legal	8,703.32
Repairs and Renewals—Machinery	3,509.69
Repairs and Renewals—Buildings	2,361.50
Archives	45.68
Children's Journal	169.32
Total	$382,753.71

SCHEDULE "3"

PROVISION FOR DEPRECIATION FOR THE YEAR ENDED DEC. 31, 1913

Classification	Rate	Amount
Building "A"—Old	5 per cent.	$ 904.78
Building "B"—New	2.5 per cent.	3,670.91
Machinery	10 per cent.	5,940.32
Furniture and Fixtures	10 per cent.	1,224.57
Type	15 per cent.	839.33
Metal	20 per cent.	1,205.48
Factory Fixtures	10 per cent.	407.37
Laboratory Equipment	10 per cent.	120.26
Total		$14,313.02

We found all books and records in good order and well and accurately kept, and, in conclusion, desire to express our appreciation of the courtesies extended to us during our examination of the accounts. Yours truly,

MARWICK, MITCHELL, PEAT & Co.,
Chartered Accountants.

Dr. Alexander Lambert, New York, Chairman, presented the report of the Judicial Council, which was referred to the Reference Committee on Reports of Officers.

Report of the Judicial Council

To the Members of the House of Delegates of the American Medical Association:

At the meeting of the House of Delegates in Minneapolis, at the suggestion of the Board of Trustees, the House referred to the Judicial Council for investigation the appeal for funds from the Home for Widows and Orphans of Physicians in Baltimore. The Judicial Council has very thoroughly considered this matter, one of its members taking a special trip to Baltimore to investigate fully the subject.

This institution is doing a generous and splendid work caring for physicians and members of physicians' families who are left penniless and destitute. The Home is a most deserving endeavor to help the unfortunates of the medical profession, but the question presented to the Judicial Council is one of broader policy than that of individual benevolence. The funds of the American Medical Association are now devoted to raising the standards of medical education; to educating and enlightening the public on matters of public hygiene and public health; to disseminating weekly to the profession the active changes in the development of medical knowledge, as evidenced by THE JOURNAL; to the endeavor to protect the profession and the public from medical frauds, and to keep the standards of drugs and other therapeutic agencies above reproach. This at present is the work of the American Medical Association—using its funds for developing the growth and usefulness of the profession. The question now arises: Must the Association also take on and bear the burden of the weak and the unfortunate who have been in the profession or who have been left by former members of the profession? Such benevolence would entail a large outlay of money It would cost $500 in original expense for each inmate annually for support and care. The institution would have to receive from all the forty-eight states any worthy individual who would apply, and to carry on this benevolence properly would require not only all the surplus of the American Medical Association but in a short time would use the entire funds of the Association

The Judicial Council feels that this philanthropy should not be undertaken by the American Medical Association. As has been pointed out the aims of the American Medical Association are for the development of the education and active work of the profession and the burdens of benevolence should be left to the local constituent state associations or better to the local branches thereof. The constituent state associations and their component county societies are better able to perform this work because they look on their needy fellow members with more personal interest than a large, impersonal, national organization can ever do.

The Judicial Council therefore recommends to the House of Delegates that charity and benevolence toward the unfortunate members of the Association be left to the local organizations. It recommends specifically that the request for support and maintenance by the Home for Widows and Orphans of Physicians in Baltimore be not granted.

AMENDMENT TO BY-LAW RELATING TO THE JUDICIAL COUNCIL

The Judicial Council recommends that Section 4, Chapter VII of the By-Laws be amended so that this section shall read as follows:

Section 4. Judicial Council.—The Judicial Council shall consist of five Fellows who shall be nominated by the President and elected by the House of Delegates. At the annual session in 1911, one member of the Council shall be elected to serve for five years, one for four years, one for three years, one for two years and one for one year, and thereafter one member of the Council shall be elected each year to serve for five years. It shall select a chairman from its membership. The Secretary of the Association shall be, *ex-officio*, Secretary of the Council. It shall expend money and contract debts only on the authority of the Board of Trustees. It shall keep a permanent record of its action at its office which shall be at the headquarters of the Association. It shall make an annual report of its decisions and the results of its investigations to the House of Delegates.

"The judicial power of the Association shall be vested in the Judicial Council whose decisions shall be final. This power shall extend to and include (1) all controversies arising under this constitution and by-laws to which the American Medical Association is a party; and (2) controversies (a) between two or more recognized constituent associations, (b) between a constituent association and a member or members of another constituent association or other constituent associations; (c) between members of different constituent associations. In all these cases the Judicial Council shall have original jurisdiction.

"The constituent associations herein referred to are those defined in Article 4 of the Constitution, and the component societies are the county or district medical societies which unite to support and maintain the several constituent state associations.

"In all cases which arise between a constituent state association and one of its component county societies; between component county societies of the same constituent state association; between a member of a constituent state association and the component society to which said member belongs; or between members of different component societies of the same constituent state association, the Judicial Council of the American Medical Association shall have appellate jurisdiction.

"The Judicial Council may, at its discretion, investigate general professional conditions and all matters pertaining to the relations of physicians to one another and to the public, and shall make such recommendations to the House of Delegates and the constituent associations as it deems necessary."

THE JUDICIAL COUNCIL AN EFFICIENT AGENCY

These changes recommended by the Judicial Council define more clearly and more fully the proper functions of the Judicial Council. If it is the desire of the House of Delegates to make the Judicial Council amount in reality to a competent and dignified court which shall adjudicate controversies between individuals, component societies or constituent associations and the American Medical Association; or the constituent associations themselves, or between these constituent associations and the individuals composing them, or between individuals themselves, there must be some definitely stated conditions under which the Judicial Council shall have primary jurisdiction, or an authorized appeal may be made to the Judicial Council. At present the Judicial Council has only original jurisdiction in cases in which the American Medical Association or one of its constituent associations is a party. There is no appellate function which it can exercise. Any case which has come to the Council in which a Fellow of the Association has demanded protection from what he considered an unjust decision of his state association, the Judicial Council has been forced to ask, as a favor, the reconsideration of the case in which an appeal would naturally have come to the Council if it had had appellate powers.

This is not an endeavor on the part of the Judicial Council to gain more power, although the Council realizes that such accusation may be made against it. In considering this appellate function, we must consider, at any rate, the necessity of the control of its own Fellowship by the American Medical Association. To-day the American Medical Association has no control over its own membership or Fellowship beyond the fact that if a member be proven guilty of secret fee-splitting, he drops mechanically, without further action, from membership in the American Medical Association. The American Medical Association is, by its present By-Laws, forced to enroll any member of any component society who makes application for Fellowship on the prescribed form and pays his annual Fellowship dues for the current year together with any indebtedness to the Association outstanding against the applicant. No matter what crimes against society, what flagrant, disgraceful breach of ethics or decency such an one may commit, the American Medical Association to-day cannot deny him Fellowship, nor has the Association power to remove from its Fellowship a member who disgraces its name or brings its Fellowship into disrepute. The American Medical Association has no power whatever to control the injuries that may be done the individual Fellow through jealousy or mistaken persecution that may arise at any point. There is no appeal open to any Fellow in the American Medical Association by which he may protect his Fellowship in the Association if he deems himself unjustly condemned by a component or by a constituent organization and deprived of membership and consequently of his Fellowship. This is not right; it is not reasonable; and such conditions should not be permitted to exist. For this reason the Judicial Council asks of the House of Delegates appellate jurisdiction in the cases mentioned above.

PRINCIPLES OF MEDICAL ETHICS

The Council also recommends that to Section 4, Chapter VIII of the By-Laws, there be added:

"Fellowship shall be further conditioned on a Fellow conducting himself in accordance with this constitution and by-laws and Principles of Medical Ethics of this Association."

In the opinion of the Judicial Council the time is ripe for the House of Delegates to proclaim that Fellowship at least in the American Medical Association is a right that must be protected. The section here recommended is not an endeavor to make the Principles of Ethics a code of rules and punishments. It is simply a demand that the rules of decency and honorable action shall be observed by the Fellows. The Principles of Ethics of the American Medical Association are only those broad rules of conduct which are naturally and spontaneously followed by honorable physicians in their dealings with their fellow men. It may be said of these rules, as of all duties, it is no credit to perform them; it is personally discreditable to leave them unperformed. They are analogous to the standards of the Army and the Navy which require that a man shall conduct himself as an officer and a gentleman.

AFFILIATE FELLOWSHIP FOR AGED FELLOWS

The Judicial Council further recommends that in Section 7, Chapter VIII, there be added the clause:

"Affiliate Fellowship.—A Fellow who has been a Fellow for a continuous term of fifteen (15) years, who is not less than sixty-five (65) years of age, and who is an honorary member of his county society and of his state association, or is connected with these organizations in an equivalent manner whereby he is relieved from the payment of dues or fees; on request of the Council of his state association may be made an Affiliate Fellow by a majority vote of the House of Delegates. Affiliate Fellows shall be privileged to participate in the scientific assemblies of the Association; they shall not be required to pay Fellowship dues and shall not receive THE JOURNAL of the American Medical Association except by personal subscription. Affiliate Fellowship shall be conditioned on the continuance of the relationship with his state association herein defined."

FELLOWSHIP DUES

The Judicial Council recommends that, wherever in the By-Laws the term "annual dues" appears, the words "annual Fellowship dues" shall be substituted. The use of the word "Fellowship" in defining the dues of those now known as Fellows will help correct a mistaken opinion which has long prevailed concerning the actual membership of the Association — the organization as a whole.

COORDINATING THE BRANCHES OF THE ORGANIZATION

The Judicial Council believes that the several functions of the different branches of the organization of the American Medical Association should be carefully preserved. It believes

that this should be carefully carried out in the work of the councils of the American Medical Association and in the work of the committees. There is no question that if a national committee or a national council shall deal directly with county societies, ignoring or going over the heads of the component state associations, that such action will soon become a disintegrating force and will disturb and antagonize the relationship between the component state associations and the national body. In all matters in which the action of the county society is necessary, these same societies should report directly to the constituent state associations, and these state organizations in turn should report to the American Medical Association. This should be true whether it be for the action of councils or of committees, or for the national body itself. The Judicial Council, therefore, desires to draw attention to Section 8, Chapter VII, of the By-Laws relating to the Committee on Red Cross Medical Work, and it desires to recommend that the words "and county" be stricken out from this section so that it shall read, "This Committee is authorized to cooperate with the National Red Cross and shall have advisory supervision over state committees having charge of the same subject, etc."

INVITED GUESTS DEFINED

It is further recommended by the Judicial Council that Section 10, Chapter VIII, of the By-Laws concerning invited guests be amended to read as follows:

"Scientists resident in the United States who are not engaged in the practice of medicine and eminent physicians and scientists from foreign countries, may be invited by the general officers, or by the officers of a section, to attend an annual session and take part in the scientific work. They shall be designated as invited guests, and shall be entitled to participate in the scientific and social functions."

ADVERTISING IN THE PUBLIC PRESS

In pursuance of its duty to investigate general professional conditions and all matters pertaining to the relations of physicians to one another and to the public, the Judicial Council calls the attention of the House of Delegates to the subject of advertising in the public press by physicians. The Judicial Council finds that the profession is restive under the flagrant misuse of the public press by certain members of the profession and certain prominent and non-prominent Fellows of the American Medical Association itself.

The Principles of Ethics of the American Medical Association define clearly the methods which are objectionable for physicians to use to bring themselves into the public notice in their endeavor to gain a livelihood. They state clearly the methods by which a man may rise by honorable endeavor to the fame of a well-earned reputation, and suggest the different methods by which a man may gain an unsavory notoriety. The standards of the medical profession have always demanded that physicians shall not exploit their ability or achievements to the laity. The medical profession condemns such advertising as quackery. The refraining from or the employment of advertising is the clearly defined difference between a reputable physician and a quack — the physician, one who quietly, through his professional work and attainments, seeks by daily honorable dealing to spread the truth among his patients; the quack, one who endeavors to obtain his livelihood by playing on the credulity of the ignorant and the timid, imposing on the public statements known to be false, stopping at nothing in his effort to enhance his notoriety or fill his pocket.

POPULAR WRITEUPS OF SCIENTIFIC SUBJECTS

Of late years the American Medical Association, through its Council on Health and Public Instruction has endeavored to spread broadcast knowledge of preventive medicine and public hygiene. It has endeavored to educate the public to an appreciation of what the physicians and surgeons are doing and what are their aims and ideals in medicine. This has aroused a widespread interest in the public mind, and the public press has eagerly seized on this propaganda as news which interests its readers and which is, therefore, something to be sought and published. This has been legitimate work of public benefit and for the public good, and no one questions that it should be highly commended. It has, however, produced the following situation: The public is eager to hear and learn all it can of the most recent advances in the cure of diseases that so far have baffled the efforts of men to cure, such as cancer and tuberculosis; it is eager to hear of the brilliant operations by which men have seemingly been saved from certain destruction and brought back to useful existence. It is anxious to learn and put in practice the best methods of public hygiene and of preventive medicine. The daily press has correctly considered such subjects as news, as that is what interests its daily readers, but the medical profession has been placed at a disadvantage. The members of the profession who value the kind of reputation which they may bear before the public and from whom the most accurate information could be obtained, have been forced to see the most garbled statements published as medical facts, or have been refused opportunities to have the truth published unless they were willing to put themselves in the false position of self-exploitation. Certain other members of the profession, however, with a very wide-awake commercial spirit, have quickly seen the means by which they may appear in the press as doing extraordinary things above their fellows, as being the ones to whom all men refer when new discoveries are to be discussed and considered, and have eagerly seized on the opportunity, which the situation has offered, to have their pictures, their honors and their doings put in the public press. They invited reporters to be present at their clinics that these surely may be reported, and have used various other methods that have appealed to their spirit of commercialism that they might increase their passing notoriety and their incomes. While this may not be quackery; it must be acknowledged to be advertising. It is frequently difficult to decide where one ends and the other begins. Certain newspapers have heralded this stepping over the limits of the former strict adherence of the profession to its non-advertising principles as something laudatory and much to be desired. They seemingly fail to understand and to appreciate that if the barriers which the medical profession has held up, and still holds up, are broken down, quackery will become more and more rampant, and although the ease with which the press will obtain the sensations it desires will increase, the accuracy and the truth and the value of the news which they so eagerly seek will soon be ruined.

The lay press has often done injustice and unconscious injury to the physicians it was endeavoring to aid. In the smaller communities a physician or surgeon may do some act, perform some operation or bring about the cure of some patient in whom the editor of a local paper is greatly interested. This editor appreciates the value of keeping a person's name before the public, and hoping to give the physician help and assistance in establishing his reputation begins to mention the doctor's daily comings and goings or operations. Before long the doctor is suspected of deliberately trying to advertise himself by means of newspaper writeups and his reputation as an upright physician suffers, while he himself may be blameless in the whole matter. In the larger communities, among the men holding appointments on the staffs of hospitals, it is not unusual, when some well-known individual is being treated at such an hospital, for the press eagerly to seek for knowledge of his condition, and many a reputable physician has squirmed to see his name and his work flaunted before the public, to his detriment as he well knows, and for which injury there is no possible redress. This situation is not localized in any one place. It is universal.

PUBLICITY COMMITTEES RECOMMENDED

To all questions there are two sides, and we must realize that if the American Medical Association endeavors to arouse in the public an interest in medical matters and increase their knowledge of public health and hygiene, with this increased knowledge will come a demand for more knowledge concerning the various diseases which may be acquired by any individual. The daily press has a right to publish that which is of interest to its readers; hence it has a right to a knowledge of medical matters that shall be accurate and given by honorable men. On the other hand, there is every reason why the medical profession shall keep up its barriers against the self-advertising of individuals for selfish purposes, and no adequate reason why these barriers should be let down.

The Judicial Council, appreciating this situation, recommends the following plan, which has already been tried and which has met the conditions presenting in a manner satisfactory to all concerned — the public, the press and the medical profession.

A few years ago the conditions which are referred to above were very acute and very flagrant in Kings County, New York, and the county society undertook the solution of the problem. At its April meeting, in 1913, this society appointed

a publicity committee consisting of three members, which sought to cooperate with the editors of the public press in order to devise a plan by which articles and interviews on medical topics by members of the society, published in the daily papers, should be truthfully and correctly reported. It was decided that this committee should undertake:

1. To prevent the publication in the daily press of misleading and erroneous statements on medical topics.

2. To prevent the publication of cures and surgical operations so exaggerated and false that mental anguish, physical suffering and expense would be imposed upon the sick and afflicted.

3. To prevent the reporting of ordinary medical cases and surgical operations of no interest to the medical profession which are misunderstood by the public and serve but to exploit the narrator.

4. To act as an advisory committee, if so desired, to members of the Society who contemplate publishing medical articles in the newspapers and who desire to conform to the Principles of Ethics.

5. To further the publication of scientific articles on medical subjects relative to the public health.

6. To seek the cooperation of the editors of the public press to accomplish these purposes.

The Committee added that it desired it to be understood that it did not discourage publicity, but on the contrary advocated the greatest publicity possible on the liberal ethical lines of the American Medical Association, which encourages members of the medical profession to give as wide publicity as possible to all matters pertaining to hygiene, sanitation and public health, but discourages all direct or indirect self-advertising. That the Committee recognized the futility of any attempt on its part to dictate to the press what it should or what it should not publish. It was thought by the Committee that the adoption of these suggestions would relieve members of the Society of any fear of criticism and aid representatives of the press in securing interviews without difficulty. The Committee wished it thoroughly understood that it would in no sense act as a complainant body against offenders, but would willingly extend its advice to those who sought its aid.

As is apparent this committee acts as a means by which, without mentioning any names and without the exploitation of any individual, the daily press can obtain accurate knowledge of all matters in medicine it desires to publish. The public can obtain through the daily press accurate information on medical matters that are of interest to it, and the names of the individuals giving the opinion remain unpublished. It is worthy of note that the Publicity Committee of Kings County in its last annual meeting, after a year of trial of this method, reported that since the appointment of the committee the daily press in Brooklyn had been singularly free from self-exploitative articles by physicians and that the newspapers, to an encouraging extent, had availed themselves of the advice that the committee was able to give them, and, further, that the committee had been able to be of use to various members of the Kings County Society in its advice regarding the wisdom of publishing or not publishing certain articles.

Members of the Judicial Council have consulted with representatives of several of the large daily newspapers in the country, and in discussing the above plan they have met with every encouragement to believe that this plan could be followed and would be fair and just to the public, the press and the profession. The Judicial Council therefore recommends to the House of Delegates the following resolution:

Resolved, That it is the sense of the House of Delegates of the American Medical Association that each county society should constitute a publicity committee whose duties shall be to give to the daily press accurate information on all medical matters of interest to the public, that this shall be freely given without the mentioning of names or from whence the information comes, and that this committee shall further act in an advisory capacity to all physicians of its society in questions relating to publications other than in the medical press. Be it further

Resolved, That the Secretary of the American Medical Association be instructed to forward this resolution, with the reasons calling it forth, to the Secretary of each constituent state association, with the request that it be transmitted to each component society of that constituent association.

Respectfully submitted,

ALEXANDER LAMBERT, Chairman,
A. B. COOKE,
JAMES E. MOORE,
HUBERT WORK,
GEORGE W. GUTHRIE,
ALEXANDER R. CRAIG, Secretary.

The report of the Council on Health and Public Instruction was called for and temporarily passed in the absence of the Chairman, Dr. Henry B. Favill.

Dr. Arthur Dean Bevan, Illinois, Chairman, presented the report of the Council on Medical Education, which was referred to the Reference Committee on Medical Education.

Report of the Council on Medical Education

To the Members of the House of Delegates of the American Medical Association:

The Council on Medical Education has now been in existence for a decade and hereby submits its tenth consecutive annual report. A brief résumé of the progress in these ten years is worth while.

PROGRESS IN TEN YEARS

In 1904 when this Council was established conditions in medical education were extremely unsatisfactory. During the previous fifty-eight years since the organization of the American Medical Association, a large number of medical colleges organized for profit and adhering to no reasonable educational standards had continued to thrive. In spite of investigations and extensive reports by temporary committees made up of some of the best men in the medical profession, conditions continued to grow worse and the number of colleges to increase until in 1904 when the Council was created, the maximum of 160 colleges had been reached. The results that have followed the reorganization of the American Medical Association and the persistent steady efforts of this permanent Council have more than surpassed the highest hopes of those who urged its organization. Instead of 160 medical colleges, there are now about 100. Instead of only four medical colleges holding to fairly high entrance standards, now there are eighty-two colleges which, after Oct. 1, 1914, will require for admission one or more years of collegiate work in addition to a standard four-year high-school education. In a number of cities instead of there being from two to seven weak medical colleges there is now, through mergers, but one college in each instance[1] which is invariably a stronger, better equipped institution. Instead of only a few medical colleges being provided with full-time expert laboratory teachers now at least eighty have ten or more such teachers. To offset the greatly increased cost of maintaining a medical school, the last ten years has seen large sums of money spent in endowments as well as in new buildings, new laboratories, and better equipment. Where ten years ago only a few medical colleges possessed adequate clinical facilities now there are many which have control of at least fairly adequate clinical material. Above all, however, instead of only a few medical colleges in 1904 which were training their students in an atmosphere pervaded by the hopefulness of medical research, now at least some effective research is being carried on in a large number of colleges.

PROGRESS IN MEDICAL LICENSURE

The progress of the decade has not been limited, however, to medical colleges. In state medical practice acts and in the state board rulings regulating the practice of medicine

TABLE 1.—STATE REQUIREMENTS OF HIGHER PRELIMINARY EDUCATION

There are now eighteen states which have adopted requirements of preliminary education in addition to a standard four-year high-school education. These states, the number of college years required and the time the higher requirement becomes effective are as follows:

State Examining Board of—	Number of Years Required	Affects Students Matriculating	Affects All Applicants
Minnesota	2	1908-09	1912
North Dakota	2	1908-09	1912
Colorado	2	1910-11	1914
Connecticut	1	1910-11	1914
Kansas	1	1910-11	1914
Indiana	2	1910-11	1914
Utah	1	1910-11	1914
Iowa	2	1911-12	1915
South Dakota	2	1911-12	1915
Vermont	1	1912-13	1916
Kentucky	2	1914-15	1918
Michigan	1	1914-15	1918
New Hampshire	1	1914-15	1918
Pennsylvania	1	1914-15	1918
Rhode Island	1	1914-15	1918
Virginia	1	1914-15	1918
Arkansas	1	1915-16	1919
California	1	1915-16	1919

1. This does not mean that all the possibilities of medical college mergers have been exhausted. On the contrary medical education could still be greatly improved by mergers in New York, Chicago, Philadelphia, Boston, St. Louis, Baltimore and elsewhere.

there have also been marked improvement. In 1904, the laws of only 20 states made provision for preliminary education and in most of these the requirement was low or of little effect. Now 45 states have definite standards and of these 37 require a standard four-year high school or higher education. In 1904 not a single state had adopted more than a high school education for the minimum requirement; now 18 state boards have adopted at least one year of collegiate work as the minimum preliminary requirement and of these 7 have adopted the requirement of 2 years of college work. In 1904 there were 13 states which did not require that candidates for license to practice should be graduates of a medical college. Now all but 4 require graduation and of these only one state, Tennessee, registers any number of non-graduates. [Meanwhile in Tennessee during the last four years 515 or nearly half of all those licensed were non-graduates.]

NON-RECOGNITION OF MEDICAL COLLEGES

In 1904, only two or three states were in any way refusing to recognize low-grade medical colleges. Now, at least thirty-two state boards are refusing to recognize diplomas issued by low-grade medical colleges. This action by State Licensing Boards is the legal power which is forcing the inferior colleges to make the needed improvements or to close their doors. Of the 107 medical colleges which were in session during the year there are 21 which are not recognized in from 24 to 32 states. Because of the requirement of two years of collegiate work as the minimum standard of preliminary education in seven states, graduates of only 32 colleges may invariably count on being eligible to register in these seven states. In six of these states graduates of 65 colleges are eligible for registration if the student had completed two or more years of work in an approved liberal arts' college prior to entering the medical school. The chart accompanying this report was published in the recent State Board Number of THE JOURNAL in order that prospective medical students might be in a position to avoid entering a medical college whose degrees are not recognized in a considerable number of states. Of course this knowledge is not published in the announcements of the medical colleges. Meanwhile, unless the remaining 18 states secure the practice acts giving licensing boards power to refuse recognition to low-grade colleges, and unless the licensing boards make use of such powers conferred on them, they will become the dumping ground for the product of these lower standard colleges.

SINGLE BOARDS OF EXAMINERS

Since 1904, New York, Texas, Pennsylvania and Georgia have secured new medical practice acts providing for a single board of medical examiners in place of (formerly) three separate and distinct sectarian boards. In these states therefore, the divided and ineffective legal power has been replaced by a single, undivided and efficient legal control of medical education and licensure. There are four states, Connecticut, Delaware, District of Columbia and New Hampshire, each of which has three separate boards but has a single control making the power equal to that of a single board. In only four states, therefore, is the legal control of medical licensure still divided between two or three boards, these states being Arkansas, Florida, Louisiana and Maryland. Last year all the graduates of the Eclectic Medical University, a low-grade medical college located in Kansas City, Mo., an institution not recognized in its own state, were examined and licensed by the Arkansas Eclectic Board of Medical Examiners. This particular college is reported to be not recognized in Missouri or by 29 other state licensing boards.

PRESENT EDUCATIONAL STANDARDS

Two years ago, the Council on Medical Education, was instructed by the House of Delegates to omit from Class A after Jan. 1, 1914 any medical college which did not require of every student for admission at least one year of collegiate work in addition to a standard four-year high school education, the additional year to include college courses in physics, chemistry, biology, and a modern language.[2] This standard has since been made the minimum requirement for membership in the Association of American Medical Colleges and a joint committee made up of representatives of that Association and of the Council prepared a schedule of the high school and collegiate courses which should be required as a minimum. That standard reported in full a year ago provided that an accredited four-year high school course should be required and which should include seven units of required courses, 2 units in English, 2 units in Mathematics (Algebra and Plane Geometry), 2 units in a foreign language (Latin, Greek, German or French) and 1 unit in American History and Civics. The courses for the remaining seven units were elective.

In the enforcement of the four-year high school standard the medical college is urged to secure for each student, direct from the principal of the secondary school attended, a statement showing the courses taken by the student, the number of weeks covered in each course, the number of periods per week, the length of the period in minutes and the final grade obtained. This simple routine procedure secures official and reliable evidence of the work done by the student, and without it no accurate idea can be obtained regarding the student's work. Meanwhile, in the southern states where the development of high schools is an urgent problem no one thing is more important than the adoption by all liberal arts' colleges of this or some other method where the student's secondary school work can be accurately estimated.

ENTRANCE TO COLLEGE BY EXAMINATION

The weakest point in the administration of satisfactory entrance requirements to medical and to other colleges is in the so-called "equivalent-examination" method. The examination is needed to test the knowledge of the occasional student whose courses in the secondary school are not regularly taken but who may have covered as much ground as the graduates. This method of admitting students, however, has been taken advantage of by some "colleges" and an "easy" examination has been provided in order to admit large numbers of students who otherwise could not qualify. The fraudulent methods by which an institution provided credentials for students seeking admission to a medical college in Chicago were published in THE JOURNAL of Feb. 7, 1914. A set of questions with the answers filled in were furnished each "student" who was told to take them home, memorize the answers and return in two weeks to take the "examination," where, of course, the same questions would be asked. In one instance, at least, when the time for the "examination" came around, the farce became even more ridiculous. The examiner deputized the preparatory school officer to conduct the examination, which he proceeded to do in the easiest manner for himself and for the students. Examination paper was given out and the students were instructed to take it home, write out the answers which had already been furnished them and return the written papers next day. Thus they did not even need to memorize the answers to the questions asked! Following this farce, nevertheless, these "students" were furnished with affidavits signed in the presence of a notary public, by a county superintendent of schools of an adjoining state, setting forth that these "students" had "passed" examinations in the required branches of the high school curriculum.

THOROUGH AND RELIABLE EXAMINATIONS ESSENTIAL

The chief evil of the examination method lies in the multiplicity of agencies having to do with such examinations, where there could well be only one in each state. To ascertain the actual value of any examination there is a fairly reliable and simple test, which should be applied—require documentary evidence when and in what school or schools

2. The Council has since voted to work toward a legal enforcement of the requirement of college courses in physics, chemistry and biology, but merely to urge colleges to adopt the foreign language requirement. It is believed that the modern foreign language should not at the present time be made a legal requirement.

the preliminary preparation was obtained. It is practically impossible for a student to pass an examination which actually proves that he has the equivalent of a standard high school course unless he can show evidence of four years or more of attendance in secondary schools, private tutoring or of other legitimate means of preparation. For example, no student could pass a fair examination in algebra unless he has actually studied algebra. So when a student is found to have attended high school only one or two years and yet easily passes an "examination" in all the subjects of a complete four-year high-school course, then it can be seen at once that something is wrong either with the examination or the examiner. A routine method of verification of every credential presented by the student whether it be a diploma or a certificate of examination should be adopted by every well-regulated college.

TABLE 2.—SCHEDULE OF HOURS FOR PRELIMINARY COLLEGE YEAR

Subject	Lectures or Recitations Per Week	Laboratory Periods* Per Week	Total Hours Per Semester	Total Semester Hours Per Year
Physics, 1.....	2	2	4	8
Chemistry, 1....	2	2	4	8
Biology, 1.....	2 or 3	2 or 1	4	8
German or French, 2	4 or 3	.....	4 or 3	8 or 6
Toatl	10	6 or 5	16 or 15	32 or 30

OR, EXPRESSED IN CLASS HOURS:

Subject	Total Hours Lectures, or Recitations	Total Hours Laboratory Work	Total Minimum Hours Didactic and Laboratory
Physics, 1.....	64	128	192
Chemistry, 1....	64	128	192
Biology, 1.....	64 or 96	128 or 64	192 or 160
German or French, 2	128 or 96	.....	128 or 96
Totals	320	384 or 320	704 or 640

* Each laboratory period must extend over at least two hours.

THE PREMEDICAL COLLEGE YEAR

There are now 82 medical colleges which are already requiring for admission one or more years of collegiate work or which have announced their intentions to do so beginning Oct. 1, 1914, and of these 37 have adopted the standard of two or more years of collegiate work. Following the instructions two years ago that the standard of at least one year devoted to college courses in physics, chemistry, biology and a modern language be required of all medical schools listed in Class A, the Council prepared the following minimum schedule of hours for each of those subjects. (See Table 2.)

This schedule was also adopted by the Association of American Medical Colleges.

ENFORCEMENT OF THE STANDARD

In administering this high requirement it has been found necessary to adopt some general rules for the guidance of the colleges. These rules are as follows:—

(1) "College work" could not be considered as acceptable unless it had been preceded by a course in a standard four-year secondary school or its full educational equivalent.

(2) In excellence of teaching and in content, the work of this premedical college year should be at least equal to the work done in the freshman year in standard colleges of liberal arts.

(3) Credits for two or more years of collegiate work should not be considered acceptable unless courses in physics, chemistry and biology have been completed. It is urged that a reading knowledge of German or French also be strongly recommended.

(4) Candidates[3] holding baccalaureate degrees from approved colleges of liberal arts but who have not taken the required courses in physics, chemistry or biology, may be admitted conditioned in those subjects, such conditions to be removed before entering on the work of the second medical year. So far as possible, however, these deficiencies should be removed during the summer preceding entrance to the freshman medical year and the summer between the first and second medical years.

(5) During the next few years (until 1917) candidates who have completed two or more years of work in an approved college of liberal arts may be admitted conditioned in one-half of the required course in physics or one-half of the course in a modern language, these conditions to be removed before the beginning of the work of the second medical year.

(6) Medical colleges giving these science courses in a premedical year, should provide expert full-time teachers in the various subjects, should provide laboratory equipment sufficient to enable the student to do the work intelligently and should provide a training in the subjects no less thorough than that given in standard colleges of liberal arts.

(7) Postgraduate courses given in high schools by high-school teachers cannot as a rule be considered equal to college courses given by college teachers.

(8) A year of work in a college of dentistry or a college of pharmacy should not as a rule be considered as an equivalent of the required premedical college science year.

The procedure set forth regarding both secondary and collegiate educational requirements is such as will bring the requirements for entrance to medical colleges of the United States into accord with the country's system of general education and not into conflict with it. The administration of these requirements should be such as will aid and not hinder the development of secondary schools and colleges.

THE CLASSIFICATION OF MEDICAL COLLEGES

Three general classifications of medical colleges have been made by the Council following complete tours of inspection. The report of the first was presented to the annual conference and to this body in 1907. That classification was not published but the colleges were notified of their standing and standards based on the data collected were published. Meanwhile it was in that year that the rapid reduction in the number of medical colleges began, and then also began the rapid increase in the number of medical schools adopting higher entrance standards. The Council's second tour of inspection was finished in 1910, and the second classification of medical colleges reported to this body. That classification was ordered published. This same year a report on medical education was published by the Carnegie Foundation, which was of great value in the efforts to secure higher standards.

THE THIRD CLASSIFICATION

The third tour of inspection of medical schools was completed in 1912 and the third classification was published. By that time eight long years of hard work had been spent in the study of medical education and its problems. By that time a systematic routine had been established for the securing of official and reliable information bearing on medical education from state licensing boards, from medical colleges, from liberal arts' colleges, from universities and from other reliable sources at home and abroad. Furthermore a better

3. At the recent conference on medical education, President A. Lawrence Lowell of Harvard University in discussing the requirement of college courses in physics, chemistry and biology, made a reasonable and timely plea for the college graduate who may not have taken all of those sciences before securing his degree, and asked that some provision be made whereby the subjects in which he was deficient might be made up without the necessity of taking an additional year of work. The Council members believe with Dr. Vaughan, who discussed President Lowell's paper, that a preliminary knowledge of the sciences named is absolutely essential for the student beginning the study of modern medicine. They also believe, however, that these more mature students who have secured a complete college training would not be handicapped if allowed to carry conditions in any of the preliminary sciences in which they happen to be deficient. After careful consideration, therefore, it is believed that this paragraph (4) makes the best provision for such students and at the same time complies with President Lowell's request.

knowledge had been secured as to what constituted reasonable standards of preliminary and medical education, and these standards had been repeatedly given wide publicity. In the third classification, therefore, the medical colleges were more accurately rated than in the two previous classifications. The ratings now given to medical colleges by the Council are not a mere matter of opinion, nor are they fixed by guess-work. They are based on an abundance of verified and reliable data which can be produced if needed. Nevertheless, the standard by which the colleges have been measured is still comparatively low and in a few years will need to be revised. The improvements in the last ten years have been so marked, however, and the standard of preliminary education has been fixed at a point so reasonably high that it is desirable to go more slowly and to allow time for a careful readjustment under the new order of things.

MEDICAL EDUCATION IN THE SOUTH

It is desirable at this time to pay a deserved tribute to the medical colleges of the South for the remarkable manner in which the problems of medical education have been grappled with. Although they have had apparently greater obstacles to work against than were found in other sections of the country, nevertheless it seems these hindrances are rapidly being overcome. They still have to deal with a very large problem, that of preliminary education, but even this is being firmly and admirably met.

In 1907, when the Council's first classification was prepared, the southern section of the country (not including Missouri and Kentucky) had forty-one medical colleges and of these only seventeen, or 41.5 per cent., could be rated in Class A. On the other hand, several were almost entirely without equipment and one was an out-and-out diploma mill. Since that year, however, by mergers or otherwise the total number of medical colleges in this section has been reduced to twenty-four, and of these, 12, or 50 per cent., are in Classes A and A+, and, leaving out of consideration a few of the colleges in Class C, the proprietary feature in medical education has entirely disappeared.

As to requirements for admission, of the twenty-four colleges in the southern section, eighteen, or 75 per cent., are either already requiring the one year of college work in addition to a four-year high-school education, or have announced the requirement to begin this fall. The most serious problems of medical education are no longer to be found in the South, but rather in some of the large cities of the East and North.

THE REORGANIZATION OF CLINICAL TEACHING

In the reorganization of our medical schools one of the most pressing needs is that of placing the clinical departments on a more satisfactory basis. Little has as yet been done in this country with this problem, and the time has arrived when the medical profession and the medical schools must take up this matter vigorously and formulate a general plan of organization of our clinical departments and urge its adoption. With this in view the Council on Medical Education has appointed a strong committee of ten clinicians, who have had great experience in teaching and who are regarded as authorities in their special departments and in medical education, to study this subject and report to the next conference on medical education.

The organization of a clinical department is a more complex subject than that of a department like anatomy, or physiology, where teaching and research are the functions demanded.

In clinical work the head of the department and his associates must be three things; first, great physicians in their special field; second, trained teachers; and third, research workers. The medical school very properly demands that their clinical teachers be men who are recognized as authorities in their special fields, both by the profession and the community. In the organization of a clinical department this fact must not be lost sight of and whatever plan is adopted must make it possible for the clinical teachers to remain the great authorities in their special fields both in the eyes of the profession and of the public.

The plan adopted by the German universities has been on the whole most satisfactory. There a professor in a clinical department is in every sense a university professor just as much as the professor of chemistry, or of physics. His university work commands his time. He must allow nothing to interfere with his teaching, his clinical work in the hospital or his research, and he devotes on the average quite as much time to his university work as does his colleague in chemistry or in mathematics. In addition to this, however, he devotes some time each day to private practice by which he maintains his position before the profession and the public as a great specialist. This can be done without neglecting his university position. In fact, if he does not remain the great physician, he ceases to be of as much value either to his students or to his university. On the other hand, if he should neglect his university work because of the time he devoted to private practice, his services should be dispensed with.

This problem of clinical teaching has been taken up during the year by the General Education Board and, as a result, an interesting experiment is to be tried at Johns Hopkins and possibly at one or two other places. The General Education Board has given Johns Hopkins $1,500,000 endowment with which to pay salaries to the departments of medicine, surgery and pediatrics. The position is taken in this experiment that the head of a clinical department should be given a very large salary and should receive no fees from private practice. It was recognized at once that the rich should not be deprived of the services of these experts, so the grotesque plan is proposed that these men may do private practice but that fees from that practice are to be turned into the university treasury and not into their own pockets.

The men who proposed this plan, and provided the money necessary to make the experiment, are non-medical men; they do not have the medical point of view and they do not understand the complex functions demanded of the clinical teacher.

This plan has not been well received by the clinical teachers and finds its supporters almost entirely among the laboratory men. It is difficult to understand if the teachers in a medical school are to be placed on salaries and not permitted to receive any compensation for outside work, why the clinical teacher should be given a very large salary and his colleague in anatomy, or in pathology a comparatively small one. The sweating of the scientific men who have devoted their lives to teaching and research on miserable salaries is notorious. Advantage has been taken of the fact that their scientific enthusiasm would hold them to their work and they are often as underpaid comparatively as the workers in a sweat shop. Surely, if the medical department of a university receives large endowments for the payment of salaries, the men teaching in the laboratory sciences should receive the first consideration. Again, if a clinical department obtained large sums for salaries, why should they pay a very large salary to the head of the department who in a very limited amount of time devoted to practice could obtain for his services much more than the amount of such salary? Would it not be better to devote the available money to paying several younger men from 25 to 35 years of age—their more productive years—to devote practically all their time to teaching and research? Fortunately for the plan, the men who are responsible for it recognize that it is an experiment and frankly advise that it be not adopted by other medical colleges until it has been tried out on Hopkins.

The fact that such a plan has been seriously proposed by laymen interested in education, emphasizes the necessity of a thorough reorganization of our scheme of clinical teaching along lines to be determined and agreed on by a committee of our best clinical teachers.

THE HOSPITAL INTERN YEAR

During the last year the Council has continued its investigation of the hospital situation of the country and the subject of the required hospital year. The subject is a large one

and it will be some time before a complete report can be presented. Sufficient progress has been made, however, so that certain general statements can be made.

I. There are enough good hospitals in the country to afford internships each year to every man now graduating in medicine.

II. The better schools are practically unanimous in favoring the adoption of the compulsory hospital intern year.

III. It is the general opinion that this requirement should be enforced by the state licensing boards. The licensing board of each state, therefore, should be urged to adopt a ruling making this hospital year a requirement for the license to practice in that state or if necessary to secure such modification of the medical act as may be necessary to put such a requirement into force.

IV. In the adoption of this hospital year requirement we would urge that it be made compulsory for students entering medical schools in October, 1914, which would make it apply to all graduates of 1918 and thereafter. This will give ample time for a complete investigation of the hospital situation of the country; time for each school to put itself in touch with the hospitals within its sphere of influence and to provide opportunities for its graduates. It will allow time also for the state boards to develop the machinery necessary to put the requirement into effect.

A first report of the hospital situation will be issued during the present year.

POSTGRADUATE MEDICAL INSTRUCTION

Provision has been made for a careful investigation of postgraduate medical instruction and the inspection of the postgraduate medical schools of the country has already begun. A special committee of the Council with Dr. H. D. Arnold as chairman has the work in charge. A preliminary report was presented at the last conference. Rather than "postgraduate" education, it was shown that it would better be described as "graduate" education, which is the term customarily used by universities. The objects of graduate medical instruction were:

1. To offer advanced instruction and opportunities for research.

2. To prepare physicians for special fields of work.

3. To offer opportunities for review, and for keeping in touch with the advances in medical science since the physician graduated.

4. To make up the deficiencies in previous medical education.

ADMISSION REQUIREMENTS

It is evident from the discussion of the scope of graduate medical instruction that there can be no uniform admission requirements of an educational nature, such as may be reasonably imposed on undergraduate medical schools. Adequate preparation of an individual to take any given course should, however, be insisted on. As a matter of benefit to the public, any earnest, reputable practitioner, licensed by the proper authorities to practice medicine on the public, should be allowed to take such courses as he is qualified for by previous training and experience.

CERTIFICATES

It is generally recognized that the loose regulations about granting certificates for "postgraduate" work often result in a definite evil. Such a certificate usually has a form similar to a diploma. It is suitable for display and is calculated to impress the public. Ordinary people are apt to regard such a certificate, displayed in a doctor's office, in much the same light as a degree, and they look on its possessor as a full-fledged specialist in any subject mentioned on the certificate. Advantage is taken of this fact by unscrupulous physicians who pose as specialists without any real justification in the knowledge or experience they have gained. Such practice is little short of quackery. The American Medical Association should use its influence to correct this evil, for the whole profession suffers in reputation on account of the poor work done by such so-called "specialists." The graduate school should under no circumstances be conducted or considered as a "credential mill."

PROPRIETARY SCHOOLS

While graduate medical instruction has been taken up by many of the regular medical schools, there have arisen a number of proprietary "postgraduate" schools. Some of these are doing excellent work and have satisfactory ideals, but many are little better than commercial enterprises for the direct or indirect financial benefit of those in control. The situation in regard to proprietary graduate schools is the same as existed among regular medical schools before the Council on Medical Education began its campaign. Possibly conditions are worse. There are the same objections to proprietary graduate medical schools as to proprietary undergraduate schools. It is to be hoped that those which are really doing good work will see the advantage of association with a medical school or university of good standing. The standards of instruction and the ideals of the graduate school should be fully as high as those of the undergraduate medical school. Puplic opinion will frown on commercialism in graduate medical instruction just as much as it does in undergraduate teaching.

THE OBJECT OF THE COUNCIL IN INVESTIGATING GRADUATE MEDICAL SCHOOLS

The ultimate object of the Council on Medical Education is to furnish more competent physicians for the community. For the attainment of this object it is not only necessary to raise the standards for the degree of Doctor of Medicine, but it is desirable to encourage and to regulate graduate medical study. Only through the latter means can the Council reach physicians already in practice. Up to the present its endeavors have been concentrated on the undergraduate schools. It believes that the time has now come when it may advantageously take up the other work also.

The recent and rapid improvement in undergraduate medical schools will result in turning into the profession hereafter better trained physicians. Something, however, needs to be done for the multitudes of doctors who are already in practice, many of whom graduated from medical schools which could not give them the desired training. In the interests of the communities where these doctors practice, nothing is more important than that graduate courses in medicine should be developed in this country, so that these doctors can take additional work, to the benefit both of themselves and of their patients. Some of these doctors have realized their needs sufficiently to sacrifice the time and money required to take graduate work abroad. How much more important it is that those who do not at present realize their needs, or those who cannot afford these foreign trips, be given the opportunity nearer home to secure additional training.

AN INVESTIGATION OF PRESENT CONDITIONS ESSENTIAL

Recommendations based on the knowledge thus obtained will follow. The problems are in many respects different from those of the undergraduate schools. It has already been noted that there can be no uniform admission requirements of an educational character. While the scope of a graduate school may reach from elementary to the most advanced courses, few will be able to cover satisfactorily the whole range of such studies. The extent of the course cannot, therefore, be a basis for approval; neither can the length of time the graduate stays at the school. The quality of the work must, of course, be up to the standards already fixed, if the courses are of undergraduate grade. The problem of standards for more advanced courses is a new one.

Whether or not it will be wise to attempt a classification of graduate schools remains to be seen. It is evident that any system of classification must be more complicated than the present classification of medical schools. One school may have excellent opportunities for instruction in clinical subjects, but may be very poor in the laboratory courses; or the reverse may be true. Schools should be encouraged to do only such work as they can do well, but they should in some

way receive proper recognition for good work, no mattter how limited the field is. In a medical center, where there are two or more schools, it would seem desirable to arrange some plan for cooperation between the schools in graduate instruction. Each school can do the work for which it is best equipped, or in which it is most interested.

The more the subject of graduate medical instruction is studied the more important it appears in relation to the proper care of the public. The object of the Council is to be helpful to those schools which wish to give good instruction of this sort, and to gather reliable information for the benefit of those who are seeking for such instruction.

RECAPITULATION

The following facts will show in a measure the progress made in medical education during the first decade of the existence of the Council on Medical Education:

(a) Instead of having 160, or one-half of the world's supply of medical schools, this country now has about 100, and these have been greatly improved in every respect.

(b) Instead of only four medical colleges requiring one or more years of college work for admission there are now eighty-two which either have already put that requirement into effect or have definitely voted to do so beginning this fall.

(c) Eighteen state licensing boards have adopted the requirement of one or two years's of college work as their minimum standard of preliminary education, and three other states will have adopted that requirement before the summer is over. Of these twenty-one states, seven require two years of collegiate work as the minimum standard.

(d) The licensing boards of thirty-one states are now using their legal powers to refuse recognition to low-grade medical colleges, leaving eighteen boards which do not have legal authority so to do, or which are not utilizing that power.

(e) In four more states, New York, Texas, Pennsylvania and Georgia, single boards of medical examiners have been secured replacing the old arrangement whereby the authority to enforce the requirements of the practice act had been parcelled out to three separate and often conflicting boards. Single boards are still seriously needed in three or four states, chiefly in Arkansas and Florida.

(f) Great improvements have been made in the administration of entrance requirements of medical colleges, nevertheless, it is now clearly known that the chief remaining evil is in connection with the so-called "equivalent" examination. Entrance qualifications in this respect need to be better safeguarded.

(g) Three general classifications have been reported by the Council in 1907, 1910 and 1913, respectively. The last has been revised in regard to the ratings of several colleges during the last year.

(h) The present classification of colleges is based on a ten-years' study of medical education including four inspections of practically all medical colleges. The ratings, therefore, are not a matter of guess work but are based on reliable data which are on file.

(i) Twenty-eight states are now supporting medical education and in fifteen of these states the only medical school in the state is the medical department of the state university. There are only ten states having medical colleges in which the states do not contribute directly to the support of medical education.

Other portions of the report are summarized as follows:

(j) There needs to be a reorganization of the clinical departments in our medical schools, whereby clinical teaching may be placed on a more satisfactory basis. Toward this end a committee composed of ten prominent clinicians has been appointed who will bring in a report on this important subject at the next conference of the Council.

(k) Investigation shows that at the present time there are enough good hospitals in this country to provide internships for all graduates of medical schools, and the sentiment of all the better medical schools favors the adoption by state boards of a requirement that before he is eligible for a license every candidate must have served such an internship. It is suggested that such a requirement if adopted by state boards should be made to apply to graduates of 1918 or 1919 and thereafter.

(l) A careful study of graduate medical instruction has been started by a special committee of the Council. The problem differs greatly from that of undergraduate instruction. Admission requirements should be that "any earnest, reputable, licensed practitioner of medicine" would be allowed to take such courses as he is qualified for by previous training and experience. There should be definite regulations in regard to the granting of certificates so as to prevent any suggestion of these schools being diploma mills. These schools eventually like undergraduate medical schools should be developed as departments of universities.

(m) The development of graduate medical education is one of the immediate and pressing needs. There is an abundance of clinical material in our large cities which should be developed so that graduate courses may be taken by physicians who cannot spare the time and money necessary to go abroad. The development of graduate medical education is the next great step in the provision for a better trained medical profession in this country.

The work of this Council has been carried on with a remarkable cooperation, both on the part of the colleges and of the state licensing boards. The results of the Council's work speak for themselves. There is still a great deal of work, however, that this Council can accomplish. The abundance of information collected at headquarters and the experience of the last ten years constitute a valuable working capital and give assurance that the future work of this committee will become more and more effective in the efforts of the American Medical Association to provide the public with better-trained physicians and to carry on a more successful warfare against sickness and distress.

Respectfully submitted,

ARTHUR DEAN BEVAN, Chairman,
JAMES W. HOLLAND,
GEORGE DOCK,
WILLIAM D. HAGGARD,
HORACE D. ARNOLD,
N. P. COLWELL, Secretary,
Council on Medical Education.

Dr. George M. Kober, District of Columbia, Chairman, presented the report of the Committee on Red Cross Medical Work, which was referred to the Reference Committee on Reports of Officers.

Report of the Committee on Red Cross Medical Work

To the Members of the House of Delegates of the American Medical Association:

The Committee on Red Cross Medical Work was created at the 1912 session as the result of a communication from the chairman of the Central Committee of the American Red Cross requesting the appointment of a committee to consult and advise with a committee of the American Red Cross as to the best arrangements to be made for medical relief in times of disaster. In accordance with Section 3 of Chapter VIII of the By-Laws, the President appointed the undersigned Committee.

In February, 1913, a communication was addressed to the secretaries of 1,150 component societies affiliated with the American Medical Association. The circular letter set forth the fact that the American Red Cross desires to enlist the sympathy of the medical profession in general and the active cooperation of representative men of that profession in time of disaster or other emergency which may occur in any section of our country. This communication pointed out that the object could be best attained by the creation of committees on Red Cross medical work in every county medical society.

Your committee believes that after securing the appointment of such committees with names and addresses, the Red Cross will be assured of the services of qualified medical

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men and that it will not be a difficult matter for that organization to effect a concert of action between the various activities of the Red Cross in any community, by such measures and by such individuals within its organization as might seem best to bring about the result. This circular was reprinted in the *Bulletin* of the American Medical Association in such a manner that it could be removed and placed with the memoranda of the secretary for consideration and action at the next meeting of the county society (Appendix A[1]).

In response to this action, fifty-seven county medical societies in twenty-four states appointed committees by May 1, 1913. During the veterans' encampment at the celebration of the fiftieth anniversary of the Battle of Gettysburg, July 1-4, 1913, the Red Cross was called on to assist the Army in the work of taking care of the veterans, and the physicians who performed the work on that occasion were chosen by the Committee on Red Cross Medical work of the Medical Society of the District of Columbia. The report of Dr. Robert U. Patterson, Major, Medical Corps, U. S. Army, in charge of the First Aid Department, indicates how satisfactorily the plan will work in any and all of the emergencies in which the Red Cross may be called on for the mitigation of human suffering and the saving of lives.

In October, 1913, Dr. Patterson requested your committee to expedite the formation of local Red Cross committees in state and county medical societies. This request was based on the fact that during the summer, matters requiring the intervention of the Red Cross and the services of reputable medical men had come up in various parts of the country, but owing to the lack of local committees in the medical societies there was considerable difficulty in getting reputable men to act for the Red Cross (Appendix B).

In order to solve this difficulty temporarily, the Secretary of the American Medical Association volunteered to furnish the American Red Cross with the names of the president and secretary of any county medical society in which no committee had yet been formed, so that these officers may be called on to recommend competent men for emergency work. This plan will answer as a temporary expedient, but in view of the frequent changes in the personnel of the officers, it will be necessary to telegraph first to the Chicago office to secure the latest list of names and addresses and then to the respective officers for assistance.

All of this involves expense and delay and can be obviated by the organization of permanent committees. The First Aid Department of the Red Cross, on the appointment of such committees, proceeds at once to get in touch with the organization, prepares and keeps for reference a card index of the names of the individual members of the committees, and also of the physicians recommended by them. Committees which have been appointed and have not recommended men for active service are reminded from time to time to do so, as indicated in Appendix C.

In view of the possibility that the Red Cross may be called on to give actual assistance to the armed forces of the United States (which is one of the principal obligations of the Red Cross and the primary reason for its existence), your committee recently addressed a second circular letter to the secretaries of the county medical societies who have not yet responded, urging immediate action. A letter signed by Major Patterson in charge of the First Aid Department accompanies the printed letter and requests the names of the gentlemen composing the committee, and also the names of physicians who are willing to enter the service of the Red Cross, if called on, and who are recommended as fully qualified in the opinion of the local committee (Appendix D).

By these methods it is hoped that the Red Cross will soon have a creditable enrolment of physicians. In this connection it may be of interest to note that the Red Cross has an enrolment of nearly 5,000 trained nurses, many of whom are ready to respond for service on very short notice.

1. Appendices A, B, C, D and E are here omitted, because of lack of space. All will appear in the reprint of the Proceedings of the House of Delegates. Appendix A also appeared in THE JOURNAL, Correspondence Department, May 9, 1914, p. 1493.

Appendix E was issued by the Bureau of Medical Service of the American Red Cross, May 1, 1914, and is of interest since it contains information as to the classification of individuals needed for work in case of war, the organization of field columns, hospital columns, supply columns, physical requirements, compensation, etc.

The committee takes pleasure in reporting that up to May 1, 214 county medical societies located in thirty-seven states, including the District of Columbia, have organized committees on Red Cross medical work: Alabama 4, Arizona 2, Arkansas 8, California 5, Colorado 2, Connecticut 5, District of Columbia 1, Florida 3, Georgia 5, Illinois 14, Indiana 18, Iowa 16, Kansas 5, Kentucky 9, Louisiana 3, Maine 3, Massachusetts 3, Michigan 3, Minnesota 3, Mississippi 6, Missouri 10, Montana 1, Nebraska 6, New Jersey 1, New Hampshire 2, New Mexico 1, New York 15, Ohio 10, Oklahoma 7, Pennsylvania 10, Rhode Island 3, South Carolina 2, Tennessee 6, Texas 10, Virginia 3, West Virginia 3, Wisconsin 5, total 214.

The clouds of war which appear to threaten our country may pass away, but it is a patriotic duty to be prepared for each and every disaster which may befall some section of our broad land, whether caused by war, floods, tornadoes, forest-fires, mine-explosions or other catastrophies. In order that there may be a comprehensive system of cooperation between the Red Cross and the American medical profession in the mitigation of human suffering and distress, your committee recommends prompt action by all the medical societies in affiliation with the American Medical Association.

Respectfully submitted,

GEORGE M. KOBER, M.D., Chairman.
WILLIAM J. LYSTER,
Major, Medical Corps, U. S. Army.
E. M. BLACKWELL, Surgeon, U. S. Navy.

On motion, which was duly seconded, the House of Delegates adjourned until 2 p. m.

Second Meeting—Monday Afternoon, June 22

The House of Delegates reconvened at 2:15 p. m. and was called to order by the President.

The Secretary announced a quorum present.

The minutes of the previous meeting were read and approved.

Dr. D. Chester Brown, Connecticut, Chairman, presented a supplementary report from the Committee on Credentials, naming the delegates entitled to be seated.

Dr. Frank B. Wynn, Indiana, Chairman, presented the report of the Committee on Scientific Exhibit as follows, which was referred to the Board of Trustees:

Report of Committee on Scientific Exhibit

In order to expedite the work of the Scientific Exhibit it is urged that the President of the Association be empowered to appoint at once a Committee on Awards, in order that they may give due consideration to the relative merits of exhibits. The usual appropriation of $1,000 is recommended for the development and maintenance of the Scientific Exhibit for the ensuing year.

It is not the purpose at this time to particularize as to exhibits or exhibitors, these being scheduled in the official program. While the exhibit deals with a wide variety of subjects, yet the thing most apparent is that the live topics related to both medicine and surgery are made prominent. Diagnosis by the Roentgen ray in the nature of things occupies a large space. The cancer problem justly receives conspicuous consideration, being represented by no less than eight exhibits, showing chiefly modern researches; some of them interesting and most suggestive. Most of all, perhaps, the visitor to the exhibit will be impressed by the large number of research exhibits, some representing original work never before shown, and dealing with practical problems of medicine and surgery. These number seventeen. Enumeration of some of the subjects with which these research

exhibits deal will give an idea of their scope, the line of investigation pursued and the great interest they must arouse:

Experimentally induced pneumonia.

Experimentally produced hydronephrosis.

Effects of collargol injections of the kidneys in dogs.

Lateral blood-vessel anastomosis in the cure of arteriovenous aneurysm.

Relation of gastric ulcer to cancer.

Effect of diet on tumor growth.

Hereditary factors in mice cancer.

Specimens showing communication of erythema nodosum to dogs.

Effects of chronic lead-poisoning on the livers of guinea-pigs.

The effect of feeding pituitary extract in hastening genital development in rats.

Fortunately those who are presenting these exhibits will take much time and great pains in demonstrating them to the members of the Association.

In this fifteenth year of the Scientific Exhibit's hostory one is prone to revert to some phases of its evolution. The earlier presentations were essentially large, museum-like collections of pathologic specimens. Some such are still presented. They are interesting and teach valuable lessons. Their weakness lies in their heterogeneous make-up. They present a vaudeville-like exhibition of great variety in rapid succession, which entertains and in a limited way instructs. The individual is gorged with miscellaneous facts which are not properly digested. Many excellent men, eminent as teachers, are still laboring under the erroneous impression that what we want in the Scientific Exhibit is the large museum collection. Accordingly they hesitate to participate because of the great labor, expense and loss from breakage in transportation.

Long experience and observation have taught use that from considerations both of economy and of usefulness, the bulky heterogeneous exhibit should give place to the smaller serial exhibit or better still the research exhibit. A single topic, illuminated from every aspect by an exhibit which is systematically arranged and efficiently demonstrated, will drive home a lesson in a manner not to be forgotten. It is like the great play which revolves about one central idea, holding it up with power and impressiveness before the auditor and observer. The memory cannot escape an indelible impression.

Exhibits like those just suggested offer ususual opportunities alike to exhibitor and to observer. To the former it gives the rare privilege of setting before the profession his work, bringing appreciative consideration; it not only enables the visiting member to catch the practical advances in medicine and surgery, but also shows him the keen edge of scientific progress. Thus is the way made plain for the practical in medicine—the art of our profession.

We would urge on the members of the House of Delegates attendance at the Scientific Exhibit, not merely as a perfunctory duty, but as a privilege of this meeting which no member of the Association can afford to miss. The Scientific Exhibit is your child—virile and hopeful and yet needing the poise and practical direction of your sober judgment. The exhibitors are bearing splendidly the light of advancing scientific thought. It is for you to shade that light and reflect its rays into the practical ways of professional life.

FRANK B. WYNN, Director, R. C. COFFEY,
LOUIS B. WILSON, ALFRED STENGEL,
C. C. ROSENOW, W. S. THAYER,
C. C. BASS, S. B. WOLBACH,
ROSS MCPHERSON.

The President appointed as a Committee on Awards for Scientific Exhibits, Drs. D. H. Murray, New York; Richard M. Pearce, Pennsylvania, and W. J. Means, Ohio.

Dr. Cressy L. Wilbur, District of Columbia, Chairman, presented the report of the Committee on Nomenclature and Classification of Diseases, which was referred to the Board of Trustees. The report follows:

Report of Committee on Nomenclature and Classification of Diseases

To the Members of the House of Delegates of the American Medical Association:

As stated in our report last year, your committee has been in correspondence with the committee of the Royal College of Physicians of London appointed to prepare the fourth decennial revision[1] of the English nomenclature of diseases. In a recent letter to Dr. Leonard Guthrie, Secretary of the Nomenclature of Diseases Committee, I wrote on behalf of our committee:

"In correspondence with the members of our committee there is a general desire to delay our report, making only a report of progress at the next meeting of the American Medical Association, June, 1914, in order that we may be able to learn the results of your preliminary work, to exchange ideas on certain points therein, if it seems feasible to do so, as kindly suggested in your note, with a general view to the promotion of a close correspondence between the nomenclatures used in the two countries.

I would therefore greatly appreciate it if you could furnish me with any information in regard to the progress of your work, any general recommendations, etc., so that our committee may incorporate them in our report of progress to the House of Delegates of the American Medical Association next June."

Should such information arrive prior to the presentation of this report it will be appended. The great advantages of cooperation to the end that the nomenclatures of diseases employed in the English-speaking world may be in close accord are so obvious that it would seem wiser to defer the preparation of a final report for the present. Moreover, in view of the relations of the proposed form of our nomenclature to the International List of Diseases and Causes of Death, employed for morbidity and mortality statistics, and the approaching date for the decennial revision of this system —which may introduce radical changes in its general arrangement—it is believed that more will be gained by deliberation at the present juncture than by precipitate action. It is therefore suggested that the committee be continued, with power to add to the list of its collaborators in order to consider special phases of the work, in conjunction with the English committee as far as practicable, and that it also devote some attention to the preparation of suggestions for the revision of the International List, which, if accepted as the outline or form for the arrangement of general morbidity, mortality and hospital statistics, has important relations to the subject of nomenclature proper.

In this connection it is of interest to state that a second edition of the Physicians' Pocket Reference to the International List of Causes of Death has been sent by the Bureau of the Census to all physicians in the United States. Copies have also been placed, through their instructors, in the hands of senior medical students. The booklet contains a list of undesirable terms, framed as a result of the conferences of this committee, during Doctor Foster's chairmanship, with committees of other national organizations, which are thus brought forcibly to the attention of physicians throughout the country with the recommendation that they be disused. Marked copies of this list are sent to physicians employing such terms in making out certificates of death by the census, state and city registration authorities, and sometimes by other agencies in connection with the request for more definite information. It is apparent, therefore, how readily a standard nomenclature may be made available for the improvement of medical reports.

Respectfully submitted,

CRESSY L. WILBUR, Chairman,
ROBERT J. CARLISLE,
ALEXANDER DUANE,
FRANK B. MALLORY,
WILBER E. POST,
GEORGE DOCK,
J. CHALMERS DA COSTA,
WARREN COLEMAN.

1. Fifth Edition.

Dr. James T. Gwathmey, New York, a member of the Committee on Anesthesia, presented the report of that committee, in the absence of the Chairman, Dr. W. D. Gatch. The report is as follows and was referred to the Board of Trustees:

Report of the Committee on Anesthesia

To the Members of the House of Delegates of the American Medical Association:

In the report of this committee submitted to the House of Delegates last year it was proposed that the work of this committee should in future be conducted along the lines so successfully followed by the Council on Pharmacy and Chemistry: namely, that the Committee on Anesthesia should undertake the preparation of a comprehensive and critical review of the entire subject of anesthesia, and that the information therein contained should be made easily accessible to all physicians either by publication in THE JOURNAL of the Association or in pamphlet form. Our well-known shortcomings in anesthesia were cited as evidence for the need of such a report. This proposal was approved by the House of Delegates.

The committee now has the pleasure of reporting that a good beginning has been made in carrying out this plan. The members of the committee who had opportunity to do so have carried out experimental and clinical investigations which have been embodied in the complete report. We have deemed it best to secure the assistance, whenever possible, of original investigators of important questions bearing on anesthesia, thereby making the information contained in our review first-hand. For such assistance we desire to express our thanks.

We have sought to lay especial emphasis on the fundamental scientific principles of anesthesia, since such information is not always easily accessible, and since success and progress in practical anesthesia is largely dependent on a correct understanding of these principles.

The titles and authors of the various articles of the review are as follows:

Intratracheal Insufflation, Samuel J. Meltzer.

The Theory of Anesthesia, Evarts Graham.

Anoci-Association, George Crile.

The Present Status of the Acapnial Theory of Shock, Yandell Henderson.

Present-Day Methods of General Anesthesia, James T. Gwathmey.

Rectal Anesthesia by the Use of Mixtures of Oil and Ether, James T. Gwathmey.

Present-Day Methods of Local Anesthesia, James Mitchell.

Recent Studies of the Physiology of Anesthesia, W. D. Gatch.

We are aware that there are many more subjects which deserve to be covered in this review, but we have deemed it best at the present time not to attempt more than we have. We hope that if the present review is well received, subsequent committees on anesthesia may add to it from time to time.

Respectfully submitted,

W. D. GATCH, Chairman,
REID HUNT,
JAMES T. GWATHMEY,
THOMAS S. CULLEN,
EVARTS GRAHAM.

Dr. Henry B. Favill, Illinois, Chairman, presented the report of the Council on Health and Public Instruction, which was referred to the Reference Committee on Legislation and Political Action.

Dr. Thomas McDavitt, Minnesota, Chairman of the Subcommittee on Uniform Regulation of Membership, presented the report of this committee, which was referred to the Reference Committee on Legislation and Political Action.

The reports of the Council on Health and Public Instruction and its subcommittees follow:

The Report of the Council on Health and Public Instruction[1]

To the Members of the House of Delegates of the American Medical Association:

The plans of the Council have now developed to a point where a comprehensive program can be outlined, which will embrace all of the present and future activities of the Council and will show clearly their relation to each other, their relative importance and the order in which they can be taken up. In outlining such a program, the Council assumes that its primary object is to place before the profession and the public of the United States the objects, purposes and work of the organized medical profession, as represented by the American Medical Association and its constituent and component branches, and to place the Association and its efforts before the public in such a way as to secure public support and endorsement for our efforts for the improvement of public health conditions in the United States.

Careful study of the present situation leads to the conclusion that a rational program must include three general lines of action. These are:

1. A thorough investigation of present public health conditions in the United States, with a view to securing more accurate information on all phases of the public health problem than is now available.

2. Education of the public by every possible means in order that the people may understand the enormous advances in scientific medical knowledge during the last generation and the possibility of utilizing such knowledge in the prevention of disease, the reduction of the death-rate and the prolongation of human life.

3. The crystallizing of such educated public sentiment in necessary public health laws, regulations and ordinances, which will render possible a conservation of human life commensurate with our advancing knowledge and which will render such laws effective through the only force available in this country, namely, educated and enlightened public opinion.

Under the first head, namely, the investigation of the present public health situation, the need for additional knowledge naturally divides itself into four subheads:

(*a*) The first is the need of a survey of the public health activities of the federal government in all of its departments, with a view to determining exactly what the federal government is doing for public health. Closely related to this is the desirability of a similar survey or investigation of the public health activities of other national governments, for purposes of comparison.

(*b*) The second important field for investigation is that of state public health activities. There is to-day, in every state in the Union, some form of public health organization. Owing to our form of government, each of these organizations is working independently. As the reports of the various state boards are not made on a uniform basis, a comparison of their various activities and a tabulation of the results secured by their efforts is difficult. It is, therefore, practically impossible to-day to summarize the public health work which is being done by the different state boards of health, to compare one with another or to establish any standard by which their relative merits may be determined. The first necessity for such a comparative study of state public health activities is clearly a collection of authoritative, official data on the subject. Realizing the importance of this field of investigation, the Council has given the subject careful consideration and has been fortunate in securing the assistance of one of the leading public health authorities of the country in carrying on a study of state public health work. Beginning Jan. 1, 1914, Dr. Charles V. Chapin, Commissioner of Health of Providence, R. I., was appointed as special representative of the Council and directed to make a comparative study of the activities, equipment and accomplishments of the various state boards of health. During the past five months, in accordance with the plans formulated by Dr. Chapin and the

1. This report, and the reports of some of the subcommittees of the Council, have been greatly abbreviated for publication in THE JOURNAL. The complete report will be sent on receipt of a stamped, directed envelope.

Council, he has been visiting the various state boards, from time to time, and making a personal study of their condition. He plans to complete this study during the present year. The results of his observations will be presented later on in the form of a report on state public health work.

(*c*) Of equal importance to the federal and state public health activities is the work being done by the various municipal health organizations. Any study of public health conditions in the United States, to be complete, must include a careful survey of municipal public health work. In this field, as in that of federal health work, some practical difficulties have been encountered. The Council is planning a study of municipal health activities and hopes to have this work inaugurated during the coming year.

(*d*) The fourth important field of public health work which must be given careful attention, in order that the data on this subject may be complete, is that of voluntary public health organizations. The importance of such bodies, in supplementing and often in stimulating official organizations, is well known. One of the plans which the Council has been developing for the last two years is the coordination of the various voluntary public health organizations. An account of the efforts of the Council in this direction appeared in the report of last year.

The Council . . . deeply regrets that nothing definite has been accomplished in this field during the past year. The Council through its Chairman and Secretary has made every effort to secure some advance without forcing the Association into a position which it was felt would be unwise. The Council greatly prefers that this survey should be taken up and carried on by the organizations themselves, but if this is not done, the Council will be forced to consider plans for carrying on this work on its own initiative.

The object of the foregoing efforts of the Council is the securing and presenting, in concise and easily accessible form of a comprehensive report showing the exact situation in the public health field, the agencies which are at work, what is being accomplished, how much it is costing and who is paying for it. Such a survey seems to the Council absolutely indispensable as a foundation for any permanent, constructive work in this field. The Council, in developing these plans, has encountered some unnecessary difficulties and has found some problems to solve which were not anticipated. It intends to continue its efforts during the coming year in the hope that during 1915 it may present to the profession and the public a report that will be accepted as authoritative in this field.

The second fundamental function of the Council is that of the education of the public on health matters. While theoretically the securing of the information as outlined above ought to precede such educational efforts, the Council has recognized, since its organization, the necessity of wasting no time and of using every means to place before the public the facts regarding disease and its prevention. It has, therefore, while developing its plans for securing necessary information, been carrying on, simultaneously, plans for the education of the public. The activities inaugurated during the last three years have been maintained and developed. These are principally included under the following heads: (*a*) Press Bureau; (*b*) Speakers' Bureau; (*c*) Bureau of Literature.

PRESS BUREAU

The Press Bureau, established two years ago, has been maintained throughout the year. Forty-two bulletins have been sent out to a mailing-list of approximately 4,900 newspapers at a total cost of $2,309.00 The effect of this sustained effort to supply the newspapers of the country with well-written authoritative paragraphs and articles on appropriate health topics of popular interest is becoming apparent.

SPEAKERS' BUREAU

The Speakers' Bureau, established last year, has been maintained throughout the year. The list shows the number of appointments filled by speakers in accordance with arrangements made by the Speakers' Bureau direct; and also the number of meetings addressed by speakers, which were more or less directly inspired by the Speakers' Bureau, but which were arranged independently. The table also shows the total number of meetings for which speakers were furnished, the total expense for the eleven months from July 1, 1913, to May 31, 1914, and the average cost per meeting.

BUREAU OF LITERATURE

The presentation of suitable pamphlets and reprints on public health topics has formed one of the principal activities of the Council during the past year.

Correspondence with the various state board secretaries and further discussion of this plan by the Council resulted in the presentation of plans for a series of twelve public health pamphlets as a nucleus for a standard series to be issued during the coming year:

Tuberculosis..Dr. Edward R. Baldwin, Saranac Lake, N. Y.
Small-pox and Vaccination.....
.....Dr. Jay F. Schamberg, Philadelphia
Typhoid Fever.....Prof. E. O. Jordan, Chicago
Diphtheria.....Dr. A. J. Chesley, St. Paul
Flies.....Dr. L. O. Howard, Washington, D. C.
Malaria.....Dr. W. S. Leathers, University, Miss.
Hookworm.....Dr. John A. Ferrell, Washington, D. C.
Medical School Supervision....Dr. H. M. Bracken, St. Paul
Pure Water.....Prof. George C. Whipple, Cambridge, Mass.
Measles.....Dr. H. W. Hill, London, Ont., Can.
Baby Welfare.....Dr. J. H. M. Knox, Baltimore
Scarlet Fever.....Dr. Ludwig Hektoen, Chicago

One of the most satisfactory series issued during the past year is the series of twenty pamphlets on conservation of vision, prepared by the Committee on Conservation of Vision under the enthusiastic leadership of Dr. Frank Allport of Chicago, and issued by the Council. This subject will be discussed in detail in the report of the Committee on Conservation of Vision.

An additional pamphlet has been added during the year to the Defense of Research Series, forming Pamphlet XXVI, entitled "The Charge of 'Human Vivisection' as Presented in Antivivisection Literature," by Prof. Richard M. Pearce, M.D., of the University of Pennsylvania.

Additional pamphlets in the general public health series include a reprint of the New Orleans address by Dr. Henry B. Favill, Chairman of the Council, given before the Mississippi Valley Medical Association on "Child Culture the Function of Organized Medicine," the reprint of an address by Dr. Joseph C. Bloodgood of Baltimore on the "Control of Cancer," the report on the "Municipal Regulation of Milk Supply" by Prof. E. O. Jordan at the Midwinter Conference, February, 1913, and a reprint of the paper read at the Midwinter Conference by the Secretary entitled "Sixty-Seven Years of Medical Legislation."

MEDICOLEGAL PAMPHLETS

Pamphlets on medicolegal subjects include monographs on "Laws Prohibiting Fraudulent Advertising," "State Regulation of Marriage," "Why Should Births and Deaths Be Registered," and "Laws for the Sterilization of Criminals." Other medicolegal monographs are in preparation.

SEX HYGIENE LITERATURE

The need of carefully prepared literature on sex hygiene has been apparent for some time. Owing to the amount of public interest in this subject, we have been receiving constant requests for such literature. Under the direction of the Council, the Secretary arranged for Prof. Winfield S. Hall of Northwestern University Medical School of Chicago to submit manuscripts on four sex hygiene pamphlets, two for girls and two for boys. Dr. Hall prepared these manuscripts in the story form. They have been issued in four attractively printed pamphlets which are having a wide circulation. The titles of these little stories are "John's Vacation," "Life's Problems," "The Doctor's Daughter," and "Chums."

CANCER PAMPHLETS

Owing to the public interest in cancer and its prevention, and the statement in a recent book by Mr. Samuel Hopkins

Adams, "The Health Master," that appropriate literature on this subject could be secured through the Council, it was thought advisable to arrange for the preparation of a series of pamphlets, suitable for public distribution and giving reliable, scientific information regarding cancer and its prevention. In cooperation with Dr. Thomas S. Cullen of Baltimore, chairman of the Committee on Cancer, plans have been made for a series of pamphlets on cancer including the following:

General Pamphlet on Cancer.....
.....Dr. Joseph C. Bloodgood, Baltimore
Cancer of the Skin..Dr. Henry H. Hazen, Washington, D. C.
Cancer of the Breast...Dr. William L. Rodman, Philadelphia
Cancer of the Uterus.....Dr. Franklin H. Martin, Chicago
Cancer of the Bone.....Dr. J. B. Murphy, Chicago
Cancer of the Genito-Urinary Organs.....
.....Dr. H. H. Young, Baltimore

Pamphlets on cancer of the stomach and cancer of the rectum are under consideration. The manuscripts of four of the pamphlets have been received and are now in the printer's hands, while the others will soon be completed.

MISCELLANEOUS PAMPHLETS

An accompanying table shows the pamphlets issued by the Council from July 1, 1913, to June 1, 1914, to the number of 57,250.

The preparation of suitable material for direct distribution to the public, the devising of means by which such material can be distributed and the development of writers of high scientific ability endowed with the gift of writing for popular readers are all included in the plans of the Council for development of its Bureau of Literature. It is hoped by steadily increasing the number of suitable pamphlets to build up a series which will cover practically every phase of medicine in which the public is interested.

EDUCATIONAL PLANS FOR THE FUTURE

In addition to carrying on the Press Bulletin, Speakers' Bureau and Bureau of Literature, and adding to their equipment and method of operation from time to time as necessity may demand or as the growing importance of these activities may justify, the Council also has plans for developing in the future several other methods for public education. Probably the most important of these, as well as the one most in harmony with present tendencies toward the use of pictures in education, is the development of a Lantern-Slide Loan Bureau, by which sets of stereopticon slides, prepared by recognized authorities and accompanied by a skeleton lecture or outline containing the essential facts on the subject, can be loaned to officers and members of county societies, physicians and others interested in educating the public on health topics.

Plans for such a bureau have been outlined and this work will be taken up as soon as other activities permit. Equally important is the preparation of small, portable exhibits which can be shipped to different parts of the country for exhibition in connection with conventions and public meetings of all sorts. The preparation of such exhibits, on the part of the Council as representing the Association, involves the consideration of a number of scientific, psychologic, pedagogic and practical problems which can, however, be solved in due time.

MEDICOLEGAL BUREAU

The plans for a Medicolegal Bureau, outlined in the report of last year, have been followed, the principal work at present being the collection of all available material on public health and health legislation. The assistance of secretaries of state boards of health, medical examining boards, officers of medical organizations, editors of medical journals, etc., has been solicited and much interesting and valuable material has been received. Affiliation has also been established with the legislative reference libraries and bureaus which, during the past few years, have been established in many states. Pamphlets and other material have been exchanged with these bureaus and relations established by which we shall be able to furnish all the bureaus of the country with material on public health topics. These workers in the field of constructive legislation are glad to turn over to us the special task of framing public health legislation, as this is a subject on which they are not specially informed. The influence and importance of this relation will be apparent to all those who have followed the growth of laboratory methods in legislation during the past few years.

NATIONAL LEGISLATION DURING THE PAST YEAR

In the field of national legislation, no special activities have been undertaken on the subject of a National Department of Health, principally for the reason that the program adopted by the Conference held May 5, 1913, and reported in detail last year, pledged the Council and the Association to a support of such a public health program as the President might decide to recommend during the next (present) regular session of Congress.

PUBLIC HEALTH SUNDAY IN PHILADELPHIA

One of the most effective means of putting the Association in a favorable light before the people has been the plan of furnishing speakers for the churches on the Sunday preceding the annual meeting of the Association. This plan, inaugurated at Los Angeles in 1911, was particularly successful last year in Minneapolis and St. Paul. This year the small number of churches in Atlantic City and the close proximity of Philadelphia led the Council to propose to the Philadelphia County Medical Society that speakers be furnished for the churches of Philadelphia on Sunday, June 21. This plan being endorsed by the officers of the Philadelphia County Medical Society, arrangements were made for furnishing a member of the Association to deliver an address on a suitable public health topic for every church in Philadelphia desiring to avail itself of this opportunity. Speakers were provided for 50 churches, including organizations for all denominations and sects. In addition, through the courtesy and effective cooperation of the Right Reverend Edmond F. Prendergast, Archbishop of Philadelphia, suitable printed matter was placed in the hands of the 104 parish priests of the Roman Catholic churches in the diocese of Philadelphia. The educational influence of such work cannot be overestimated.

Respectfully submitted,

HENRY B. FAVILL, Chairman.
HENRY M. BRACKEN,
WALTER B. CANNON,
WM. C. WOODWARD,
WATSON S. RANKIN,
FREDERICK R. GREEN, Secretary.

REPORTS OF SUBCOMMITTEES OF THE COUNCIL ON HEALTH AND PUBLIC INSTRUCTION

COMMITTEE ON RESUSCITATION FROM MINE GASES

To the Council on Health and Public Instruction:

As stated in the last report of the Council, a Committee on Resuscitation from Mine Gases was appointed by the Chairman of the Council at the request of Dr. J. A. Holmes, Director of the Bureau of Mines of the United States Department of the Interior. The committee visited mines in both the soft coal and the hard coal regions of Pennsylvania, met and had discussions with men engaged in first-aid work, witnessed demonstrations of methods used for first-aid and resuscitation, and studied the apparatus employed in the mines as well as that used by the United States Bureau. As a result of these observations and also as a result of further experiments and critical tests of methods employed for artificial respiration, the committee reported on the best manual method to be used in times of emergency, and suggested a greatly simplified means of giving artificial respiration mechanically. The suggestions made by the committee have been put to practical test by field workers in the Bureau of Mines, and the report of the committee will probably be published during the summer and distributed widely for use in mines where conditions of danger are likely to arise. The

committee believes that attention to its suggestions will considerably increase the chances of reviving victims of mine accidents. WALTER B. CANNON, Chairman.

REPORT OF COMMITTEE ON THE PROTECTION OF MEDICAL RESEARCH

To the Council on Health and Public Instruction:

The Bureau for the Protection of Medical Research has given aid through conferences and literature to the New York and Pennsylvania committees of the state organizations that are concerned with the opposition to antivivisectionist activities. In New York a vigorous attempt was made to obtain an investigation into laboratory and hospital conditions based on the claim that in the hospitals children were being unscrupulously used for vivisection purposes. This claim was proved to be baseless and the attempt at legislation failed.

In Pennsylvania the trial brought against certain members of the Medical Department of the University of Pennsylvania resulted in a disagreement of the jury. The charge of the judge has generally been regarded as strongly biased against animal experimentation, and his attitude has been applauded only by the antivivisectionists. Although the trial resulted unsatisfactorily to either side, it has had the remarkable effect in calling forth strong commendation of the experimental method as applied to medicine both from bodies of medical men and also widely from editors of influential journals all over the country.

Dr. Richard M. Pearce, a member of the Bureau, prepared a paper on "The Charge of Human Vivisection," which brings together a large mass of material constantly used by antivivisectionists and presents strong refutation of the claims which they have made. This paper has been published as No. 26 in the Defense of Research pamphlets.

A letter has been sent out to editors of medical journals in various parts of the country asking that they scrutinize carefully original papers submitted for publication, with the view to eliminating expressions which are likely to be misunderstood and to including a statement that anesthesia was employed when in fact that was the case, in order that the occasion for misinterpretation by antivivisectionists may be reduced to a minimum.

The question arose as to the desirability of organizing in connection with the Bureau for the Protection of Medical Research of the American Medical Association, a lay society. This question was considered in conferences both in New York and in Philadelphia. For a number of reasons, which were accepted as having greater weight than the reasons in favor of a lay organization, it was decided at each of these conferences that the establishment of a lay society is not now expedient. Instead of such an organization, a small group of active men was gathered from Philadelphia, New York and Boston and different members of this group were given different responsibilities in order that there might be helpful cooperation in these cities, which are at present the centers of the antivivisection agitation. The opinion was expressed at the New York and Philadelphia conferences that whenever opportunity arose to meet attacks made by antivivisectionists through newspaper letters, some medical man well acquainted with the facts in question should meet the assertions of the antivivisectionists in letters of rebuttal. This has proved a satisfactory method of spreading information in New York, and has been used effectively this year not only in New York, but also in Boston and Philadelphia.

WALTER B. CANNON, Chairman.

REPORT OF COMMITTEE ON CONSERVATION OF VISION

To the Council on Health and Public Instruction:

There are various state conservation of vision societies existing under different conditions and under varying degrees of activity. Some are independent organizations; others are committees of state medical societies, while others are commissions of the state governments. There is also an inactive national society.

In June, 1913, the Council on Health and Public Instruction appointed a Committee on Conservation of Vision of which I am chairman. Our first work was to prepare a weekly, non-technical article for the Press Bulletin. The eye articles on such subjects as "The Eyes and the Movies," "Face Powder and the Eyes," "Illumination in Homes, Offices, Schools, Shops, Etc.," have been copied in newspapers all over the United States and have accomplished much good.

Our committee has caused to be written twenty short pamphlets on eye topics by well-known ophthalmologists. They are written and illustrated in popular style, have a uniform appearance and are known as "The Conservation of Vision Pamphlets." They sell for 5 cents a copy or $3.50 per hundred. Many are given away. They sell freely and are well advertised. Some are in their third edition. Sets are sent free to public libraries, women's clubs, legislatures, health boards, etc. Arrangements are being made to send Dr. Carroll's pamphlet on "The Eyes of Transportation Employees" to every railroad surgeon in the United States and we propose to make similar use of other pamphlets, sending them where they will do the most good. These pamphlets are excellent material for ophthalmologists to keep in their offices to give away to patients and parents desiring information of this nature. The titles of the pamphlets and their authors are here given:

Pamphlet I.—Schoolchildren's Eyes, by Dr. Frank Allport, Chicago.

Pamphlet II.—Industrial and Household Accidents to the Eye, by Dr. Harold Gifford, Omaha.

Pamphlet III.—Wearing Glasses, by Dr. W. B. Lancaster, Boston.

Pamphlet IV.—The Relation of Illumination to Visual Efficiency, by Dr. Ellice M. Alger, New York.

Pamphlet V.—Trachoma in Eastern Kentucky, by Dr. J. A. Stucky, Lexington, Ky.

Pamphlet VI.—Auto-Intoxication and the Eye, by Dr. H. D. Bruns, New Orleans.

Pamphlet VII.—Eye-Strain, by Dr. Hiram Woods, Baltimore.

Pamphlet VIII.—Lenses and Refraction, by Dr. Frank Allport, Chicago.

Pamphlet IX.—The Eye and Its Functions, by Dr. Frank Allport, Chicago.

Pamphlet X.—Care of the Eyes, by Dr. Frank Allport, Chicago.

Pamphlet XI.—Infant Blindness, or Ophthalmia Neonatorum, by Dr. F. Park Lewis, Buffalo, N. Y.

Pamphlet XII.—Ordinary Eye Diseases, by Dr. L. W. Dean, Iowa City, Ia.

Pamphlet XIII.—Usual and Unusual Eye Accidents, by Dr. E. C. Ellett, Memphis, Tenn.

Pamphlet XIV.—The Eyes of Transportation Employees, by Dr. J. J. Carroll, Baltimore.

Pamphlet XV.—Ocular Hygiene in Schools, by Dr. S. D. Risley, Philadelphia.

Pamphlet XVI.—Whisky, Tobacco and Drugs and the Eye, by Dr. Edward Jackson, Denver.

Pamphlet XVII.—The Oculist and the Optician, by Dr. Melville Black, Denver.

Pamphlet XVIII.—Preparation for Blindness, by Dr. F. Park Lewis, Buffalo.

Pamphlet XIX.—What to Do for Blind Children, by Dr. F. Park Lewis, Buffalo.

Pamphlet XX.—Blindness from Wood Alcohol, by Dr. Casey Wood, Chicago.

Desiring to create a national sentiment in favor of the conservation of vision, our committee planned a lecture campaign in almost every state. A prominent ophthalmologist was appointed to manage the campaign in his state. He selected his own assistants and lecturers, and solicited invitations for lectures from local medical societies, women's clubs, teachers institutes, Chautauquas, etc. Expenses should, of course, be paid by those issuing the invitations, but if not, would have to be born by the lecturer himself. The Council allowed the committee to send to each state lecture manager a box of transportable stereopticon slides, together with

sufficient conservation of vision phamphlets, vision charts for schools, etc., to furnish ample material for lecture talks. In addition, the committee prepared a pamphlet containing a skeleton lecture which would serve as a guide for the lectures in preparing their talks. It was recommended that the lectures should not last more than one hour and should be followed by demonstrations and discussions. It was urged that while all phases of vision conservation should be explained, especial emphasis should be laid on ophthalmia neonatorum and its elimination by the Credé treatment, the prevention of shop accidents by the use of goggles and other safety devices, and the annual and systematic examination of schoolchildren's eyes by schoolteachers. If these ideas could be carried out 80 per cent. of blindness would be eliminated at almost no expense and but little trouble. And if, while the teachers are making the survey of the children's eyes, they would extend their observations to the ears, noses and throats, which would only involve an additional three minutes per child, the benefits to the children would be increased immeasurably.

It costs $15,000,000 a year to care for the dependent blind in this country. It would cost less than $250,000 to use the Credé treatment in the eyes of all newly born babes, to have the eyes, ears, noses and throats of all schoolchildren annually and systematically examined by schoolteachers, and to pay for goggles, etc., in shops to protect the eyes of laboring men. These financial considerations could be carried much further but it is not necessary. These figures alone will show where economy can be found.

The vision charts for schools distributed by our committee to the various states, contain full instructions to teachers—how they can by asking and answering nine simple questions ascertain the existence of 95 per cent. of serious eye, ear nose and throat defects and diseases. These examinations are simple and require no medical education. Teachers should not attempt to diagnose disease; they merely find that something is wrong and urge a doctor of the parents choosing. Five minutes per child is sufficient for each examination and each teacher should examine her own children. By thus subdividing the work all children in any city can be examined in one day. A definite day in the early fall should be set aside for these tests. The tests not only benefit the children but the correction of their defects benefits the teachers, as such corrections add to the intellectual and moral character of the child, thus rendering them more pliable and teachable. Teachers should therefore be glad to make these surveys, not only on account of the children, but because it makes their own school work much easier. If boards of education or health had the money to hire doctors or nurses to do this work, it would be well to place the examinations in their hands but they never have sufficient money, so this method might as well be frankly abandoned and the work given over to the teachers, who can do it sufficiently well and at no expense.

The state lecture bureau campaign has, on the whole, been successful, considering it was new and untried. Some states have failed to produce satisfactory results but the general results have been good, and sufficient to greatly encourage us for future work. As a matter of fact, the past season has been somewhat experimental, but it has laid the foundation for extensive work in the future. Most state managers have already booked lecture engagements for next fall—with medical societies, teachers' institutes, Chautauquas, etc., and the prospects are satisfactory and encouraging. At the end of this report I will tabulate the results of the lecture campaign—up to the time of handing in this report.

As to the future of this committee I beg to recommend:

1. The continuance of a weekly eye article for the Press Bulletin.

2. A few more conservation of vision pamphlets, and an increased circulation of the pamphlets.

3. The continuance of the lecturers, and the changing of the managers where the present managers have shown no real interest in the work.

4. The production of more stereopticon slides.

5. The encouragement and assistance of this committee in enabling the different states to form conservation of vision societies, committees or commissions, these organizations, however, to have no actual connection with this committee, as experience has seemed to show that it is better for the various state organizations to be independent in their nature.

6. The extension of the work of this committee so that it may become a potent power in the community. A central office should be established with the right kind of a secretary, who would supervise the work of vision conservation over the entire country. He should on call go to states requesting his assistance; his traveling expenses being paid for by those seeking his cooperation. He should have sufficient stenographic assistance and should accumulate all printed material on the subject of vision conservation. This office should work under this committee and should be recognized as a central bureau of assistance and information for all interested in this subject. Plans should here be made for model laws, the formation of societies and constitutions; the influencing of legislatures, boards of health, education, etc. A properly equipped and managed office of this kind would be of enormous importance in conserving the vision of the people of this country. It would only cost a few thousand dollars per annum to maintain. I trust some one will be found who will recognize its usefulness and will pay for it.

7. The distribution in all schools of crisply and plainly written leaflets concerning the care of eyes, ears, noses and throats. They should be taken home so that the parents can read them. They should be printed in various languages.

Perhaps even a better plan would be to have suggestions of this kind printed on the blank fly-leaf of all school-books. The expense of printing would be almost nothing and the benefits to be derived would be incalculable.

I wish to thank Dr. H. B. Favill, Dr. F. R. Green and the Council on Health and Public Instruction for the moral and financial assistance they have rendered our committee. I also wish to thank all those who have written for the Press Bulletin and the conservation of vision pamphlets. I also wish to thank all those who have assisted us in the work of the state lecture bureaus.

I herewith append a tabulated report of the state lecture bureau campaign and desire to say that a large part of the work done in Ohio has been done under the auspices of the Ohio Commission for the Blind.

No.	State and Manager	Number of Lectures	Number of Lecturers	Number of Cities	Estimated Size of Audiences
1.	Georgia, Dunbar Roy	10	10	10	1,975
2.	South Carolina, C. W. Kollock	10	8	6	850
3.	Alabama, S. Ledbetter	8	6	7	1,000
4.	Oregon, J. L. McCool	3	1	1	300
5.	North Carolina, C. W. Banner	7	4	4	2,000
6.	Kansas, R. S. Magee	7	5	6	1,050
7.	New Hampshire, E. Fritz	8	7	8	1,725
8.	Wyoming, G. L. Strader	1	1	1	100
9.	Tennessee, E. C. Ellett	4	4	4	850
10.	New York, F. P. Lewis	2	2	2	225
11.	Arkansas, H. Moulton	5	4	5	400
12.	Missouri, C. Loeb	15	12	8	2,500
13.	Utah, D. M. Lindsay	25	12	24	4,675
14.	Maine, J. A. Spalding	23	14	20	3,000
15.	North Dakota, J. H. Rindlaub	19	8	19	4,000
16.	Connecticut, G. H. Warner	2	1	2	850
17.	Washington, R. W. Perry	13	6	10	1,520
18.	Maryland, H. Woods	14	7	7	8,050
19.	Ohio, W. E. Bruner	59	39	59	14,300
20.	Kentucky, J. A. Stucky	35	2	35	10,350
21.	Delaware, J. A. Ellegood	3	2	3	675
22.	Idaho, R. L. Nourse	2	1	1	525
23.	Virginia, J. A. White	4	4	2	500
24.	Minnesota, F. C. Todd	3	3	3	500
25.	Iowa, E. R. Lewis	3	3	3	500
26.	Wisconsin, N. M. Black	1	1	1	250
27.	Washington, D. C., O. Wilkinson	2	1	2	200
28.	Michigan, W. R. Parker	4	1	3	1,430
29.	Indiana, A. E. Bulson, Jr.	45	20	25	5,000
30.	Nebraska, J. M. Patton	2	1	2	225
		339	190	283	69,425

It will thus be seen that thirty states have reported work; 339 lectures have been delivered by 190 lecturers; in 283 cities; to audiences aggregating 69,425.

When to this is added the hundreds of thousands of people who have been reached through the newspapers, by the distribution of the Press Bulletin, and the thousands of people who have been reached by the conservation of vision pamphlets, it will be seen that the work of this committee has not been in vain. I desire to also add that probably through the agency of the lectures, in the various states, school inspection of eyes, ears, noses and throats have been established in, at least, 200 cities.

Respectfully submitted,

FRANK ALLPORT, Chairman.

REPORT OF COMMITTEE ON PUBLIC HEALTH EDUCATION AMONG WOMEN

To the Council on Health and Public Instruction:

The function of this committee is to further public health education among women through the Educational committees of the state and county medical societies, and through the various women's clubs and organizations. At the beginning of the present year it was decided to settle on some one central line of work for the committee. There has never been a time in the history of this committee when such a central line has been so clearly defined by outside influences, or so distinctly within the province alone, of our committee, as at the beginning of my chairmanship. I refer to the baby health movement which has been the work on which we have been centralizing our efforts. While this has been the main line of action, we have urged two other lines of action: the first is the appointment of a woman member of the Committees on Health and Public Instruction of the state medical societies, and Public Health Education Committees of the county medical societies; second, to connect the work of the American Medical Association with the women's clubs of the country and thus draw together the existing forces so that mutual understanding and cooperation may be secured among them.

At the time of the meeting of the American Medical Association, at Minneapolis last June, the baby health movement had grown to such national importance that it seemed wise to bring together, at that meeting, representatives from the different centers of this interest, in order to secure the approval of the Association, and their official sanction of a score card. As it happens, the chairman of this committee belonged to the group of women who inaugurated the baby health movement in Iowa; the history of which can be found in the report of 1911 of the Committee on Public Health Education Among Women. According to the fixed policy of the American Medical Association, of working only through its various boards, councils and committees, the request of the representatives of the baby health movement was placed before the Council on Health and Public Instruction. After due consideration the Council gave the development of this work to the Committee on Public Health Education Among Women, authorizing the executive members of this committee to appoint, subject to the approval of the Council, a subcommittee to prepare a standard score card for the measuring and scoring of babies.

At the same time the executive members of the Central Committee were authorized to prepare such literature as would be necessary to further the baby health movement. The subcommittee on score cards, which was appointed last July, consists of Drs. Henry L. K. Shaw, chairman of Albany, N. Y.; Julius Parker Sedgwick of Minneapolis, Minn.; and Velura E. Powell of Red Oak, Iowa. At the October meeting the Council made the chairman of the Central Committee a member of the Score Card Committee, *ex officio*, and authorized the other members to select the fifth member of the committee. Dr. Godfrey R. Pisek of New York City was chosen for this place at the November meeting of the Score Card Committee in Washington, D. C., which was held in order that we might secure the advice and assistance of members prominent in the American Association for the Study and Prevention of Infant Mortality. That association had already received so many inquiries concerning score cards that a committee had been appointed to formulate some plan of action. When it was learned that our Score Card Committee was to meet there, a joint meeting of their committee and ours was arranged to discuss the baby health movement, and the compilation of a score card for babies. The joint committee meeting was held on Nov. 15, 1913, with the following members present: Drs. L. Emmett Holt, Philip Van Ingen and Miss Ellen C. Babbitt of the American Association for the Study and Prevention of Infant Mortality; Mr. Merriman of the Children's Bureau; Dr. Henry L. K. Shaw, Dr. Godfrey R. Pisek, Dr. Velura E. Powell and Dr. Lenna L. Meanes of the American Medical Association. We discussed the situation at length and received many valuable suggestions and assurance of hearty cooperation. Shortly after my return I received a letter from Dr. L. Emmett Holt in reference to the committee work in which he says:

"As you know, I am greatly interested in the work which you have undertaken and I believe it has in it great possibilities. The educational value of these conferences is bound to have an important influence on mothers in country districts and small towns who have not had the advantages which are offered to those in larger communities."

After a number of preliminary drafts of the score card were prepared by the Score Card Committee and submitted to prominent members of the American Medical Association, as well as to members of the American Medical Association for the Study and Prevention of Infant Mortality, the final draft was submitted to the Council on Feb. 24, 1914, for their approval which it received. This draft has since been printed, together with pamphlets number 4 and number 5, containing suggestions to organizations wishing to conduct baby health conferences and a book list of fifteen approved authorities on the care of the baby. Dr. L. Emmett Holt and Dr. Henry L. K. Shaw have prepared a clear, concise article on how to care for the baby; this is now in press, and will be known as Pamphlet No. 7. It will be distributed wherever contests or conferences are held. Having secured this necessary literature our efforts for the remainder of the year will be to secure the use of it through the state committees and women's organizations. Three thousand copies of the score card have already been distributed throughout the United States within the last thirty days. A corresponding number of duplicates is sent with each order of score cards. These are filled out and returned to the American Medical Association to be filed for statistical purposes.

As soon as it was decided that there was to be a subcommittee to prepare model score cards, with explanatory pamphlets and bibliography, it became necessary to formulate some plan by which we could discriminate in their distribution. After a careful study of the situation, the plan of afternoon conferences to be held by the various women's clubs, mother's congress, child study clubs, etc., appealed to us as a practical way of meeting this necessity. We put these into execution in several places early last fall and have not had occasion to be disappointed in the results.

Perhaps the description of one of these may be the clearest manner of presenting our plan. This particular conference which was held in October in a town of 3,000 people, was given under the auspices of the Child Study Club of that town. On the afternoon of the conference the largest church in town was filled from 2 o'clock until 5. In that county there are eleven physicians, eight of whom were present and responded to a three-minute speech on some phase of the child. Eight children were examined, ranging in age from 6 months to 3 years. Whenever possible the examiners called attention to interesting points as they measured and scored the babies. Literature on the care of the child was distributed and care taken that interest was aroused in these pamphlets so that the parents could, and would, read them intelligently. We measure our success in this one conference by the fact that a number of public health meetings in that

community have been exceptionally well attended since that day, and there is, at this time, a movement on foot for a permanent station in that town where babies can be measured on certain days each month throughout the year.

The attractiveness, efficiency and permanent benefit of these meetings must necessarily depend, of course, on the interest which the locality takes in them, and that interest can be originated and fostered, largely through our own Committees on Health and Public Instruction. It is here that the woman member of the committee in her intimate connection with clubs of her district can be of unquestionable value. To give us an additional aid in securing and furthering an interest in the conferences, the Council has granted us the privilege of preparing a list of speakers, to be added to their speaker's bureau, to lecture on some phase of the baby health movement throughout the different states. Some thirty women have signified their willingness to serve in this capacity. It is our desire to secure at least two speakers in each state. Our ultimate hope in connection with the conferences is that they will pave the way for creating permanent stations where babies can be examined from time to time, and also stimulate the interest of the parents to secure private measuring and scoring of their babies. If this hope is realized we feel that the baby health movement will be placed on such a solidly scientific basis that the present marvelous interest will continue permanently.

In order that the position of the American Medical Association may be clearly understood as to the measuring and scoring of babies, the Central Committee of the Committee on Public Health Education Among Women presented certain recommendations to the Council for their approval. In response the Council passed the following resolutions on Feb. 24, 1914:

That, if the awarding of any medals or prizes seems judicious in the baby health conferences, they shall be given to the babies showing the greatest improvement in health between the various examinations, rather than to the naturally healthy child who scores high at the first examination.

That, wherever possible, the establishment of permanent stations shall be urged, in order that we may have a recognized place for the distribution of our literature on the care of the baby; and for the examination of babies from time to time in order that a systematic, scientific knowledge of child welfare may be made of continued interest.

That the age limit for examination of babies at public contests, such as those held at state and country fairs, shall not be under 12 months, in order that unnecessary exposure of the child be avoided; but that the afternoon conferences and permanent stations shall not be confined to any age limit in their examinations, in order that they may have the child at the earliest age possible to correct, or check, defects by succeeding examinations.

Of the two other lines of action which our committee has followed, I wish to say of the first—the appointment of women on the Committees on Health and Public Instruction for the state medical societies, and Public Health Education Committees for the county medical societies—that shortly after my chairmanship began, I sent out letters to the different state medical societies, urging that such appointments be made. I have already received replies from over half of the states, expressing a most cordial desire to cooperate with us in every way possible. This support has been especially grateful to us in connection with the baby health conferences, as it is necessary that they should be held under competent supervision in order to have their value; otherwise not much is likely to be accomplished.

The third line of action, that of rendering to the women's clubs, wherever possible, the assistance of our Public Health Committee, has been one that has been of great interest. In reply to letters sent out to chairman of the Public Health Committees of the General Federation we have received replies from all but seven states, together with a list of the membership of their Public Health Committees and with the expressed desire on their part to cooperate with us in all public health meetings in their locality. We have placed these names on our mailing list and have mailed to them all of the literature so far produced by our committee. It will be gratifying to know that wherever we have made clear the function of our committee to the women's organizations they have expressed the most hearty appreciation of the efforts of the American Medical Association. To illustrate I shall quote from a letter received from one of the state chairmen:

"I feel that I cannot express my appreciation too strongly for the help the Public Health Committee is being to us in our public health work. Not the least part of that help lies in the assurance which is given us of feeling that such an association as the American Medical Association stands ready to give us the efficient and correct assistance which we have so often felt the need of, but did not know how to secure. Please place the names of our Public Health Committee on your mailing list."

Our Medical Literature Committee has given us most efficient help in all these lines of action. Dr. Jane L. Berry, chairman of the Medical Literature Committee of last year, prepared a most excellent list of books on various health topics which we have had printed and which will be circulated as Pamphlet No. 6. The present chairman, Dr. Mary Sutton Macy, submitted to us four valuable lists of fifteen books each, which we have had printed and of which we have already distributed 9,000. We have sent them to 3,000 libraries, and samples of same to organizations wishing to put on baby health contests or conferences. On each slip is the following note: Librarians will be glad to cooperate by furnishing lists of these books for free distribution, and by securing the books for public use. These lists were on the following topics:

Health and Hygiene of Girls.
Health and Hygiene of Women.
Rationale of Social Hygiene.
Health and Hygiene of Babies.

As an illustration I include the last list in full on Health and Hygiene of Babies and Children.

Burbank—The Training of the Human Plant.
Chapin—Theory and Practice of Infant Feeding.
Coolidge—The Mothers' Manual.
Cotton—Care of Children.
Fitz—Problems of Babyhood; Building a Constitution, Forming a Character.
Forsyth—Children in Health and Disease.
Hall—Youth: Its Education, Regimen and Hygiene.
Hogan—How to Feed Children.
Key—The Century of the Child.
Montessori—The Montessori Method.
Oppenheim—The Development of the Child.
Saleeby—Parenthood and Race Culture.
Smart—Mystery of Life Series.
Swift—Mind in the Making.
Warner—The Nervous System of the Child.

May we ask that wherever public health meetings, baby health conferences and contests are held in your respective states, you ask your State and County Public Health Committee to be responsible for the medical supervision of the same; that, in those states where there is not a committee on health and public instruction you take steps to secure the same; that you request that one member of this committee be a woman, in order that she may work more intimately and efficiently through your various women's clubs and organizations, and that you make every effort to secure the cooperation of your medical societies and public health committees among the women's federations?

As a whole we have every reason to be grateful for the progress we have made so far this year; a progress only made possible through the hearty support of all through whom we directly work, or with whom we have had occasion to advise, and because of the impetus given to our committee by the splendid work accomplished by our predecessors, Drs. Everhard and Morton and their coworkers.

Respectfully submitted,

LENNA L. MEANES, Chairman.
MARTHA A. WELPTON, Secretary.

Report of the Committee to Revise the Owen Bill

To the Council on Health and Public Instruction:

Consideration has been given to the action that should be taken in promoting legislation for enlarged public health activities on the part of the federal government. One member of your committee approached the president to elicit his interest, but owing to the stress of other matters, he was unprepared at that time to take up the matter.

This position of the president can be readily appreciated by those having in mind the great national problems that have claimed his attention thus far during his administration. It can be stated, however, that he is deeply interested in measures for the improvement of health conditions and will approach questions of health organization with an open mind.

On account of the president's expressed desire that the whole question be postponed until he is free and prepared to take it up at some future session, it seems wise that your committee take no action on the subject during the present very busy session of Congress. Hugh H. Young, Chairman.

Report of the Committee on Uniform Regulation of Membership

To the Council on Health and Public Instruction:

In the report of the committee last year, the discussion of the state secretaries in attendance at the meeting called by the committee in Chicago, October 23, 1912, was reported as well as the recommendations of the committee which were adopted by the Conference of State Secretaries. These recommendations covered the following points:

1. That the fiscal year coincide with the calendar year throughout the organization.
2. That dues in County Societies be payable on January 1 of each year and that County Secretaries report to State Secretaries not later than March 31 of each year.
3. That prorating of dues, administration fees for membership, use of uniform blanks, etc., be made optional with local societies.
4. That the question of uniform system of transfer for membership be subject to further discussion.

Following the first Conference, the committee considered it advisable to allow the entire question to remain under consideration, giving state societies time to discuss the matter and to make such modifications in their by-laws and methods as might be necessary to bring them into harmony with the rest of the organization. A Conference of State Secretaries was called at the headquarters of the American Medical Association, Wednesday, Feb. 25, 1914, by the Secretary of the Association, at which the recommendations adopted by the previous Conference were again taken up for discussion. Reports from the state secretaries present were as follows:

Arizona: Calendar year and fiscal year coincide. County Secretaries' reports due February 1.
Arkansas: Calendar and fiscal year coincide.
Georgia: Calendar and fiscal year coincide. Other recommendations adopted.
Idaho: County Secretaries' report by March 31.
Illinois: Calendar and fiscal year coincide.
Indiana: Membership roll revised on February 1 of each year. Uniform blanks used.
Iowa: Calendar and fiscal year coincide. New roll made up each year on April 1. Uniform blanks used.
Louisiana: Calendar and fiscal year coincide. Roster made up on January 31.
Maine: Recognizes advisability of having calendar and fiscal year coincide, but has not yet made the necessary changes.
Massachusetts: Calendar and Fiscal year coincides, but has system of membership different from the other State Associations.
Mississippi: Has adopted five recommendations of last Conference.
Missouri: Has adopted first four recommendations, but finds uniform blanks not practical.
Montana: Calendar and fiscal year coincides. Roster made up on March 1.
Maryland: Calendar and fiscal year coincides. Roster made up on March 31.
Nebraska: Calendar and fiscal year coincides. Roster made up March 31.
Nevada: Calendar and fiscal year coincides. County Secretaries' reports due on January 1.
New Jersey: Calendar and fiscal year coincide.
New York: Attempting to enforce uniform regulations, but with partial success.
North Carolina: Has not yet fully conformed to the recommendations of the first Conference.
North Dakota: Has adopted all of the recommendations of the first Conference.
Ohio: Calendar year and fiscal year coincide.
Oklahoma: Calendar and fiscal year coincide.
Oregon: Calendar and fiscal year coincide.
Pennsylvania: Gradually developing uniformity throughout the State.
Rhode Island: Calendar and fiscal year coincide.
South Carolina: Calendar and fiscal year coincide.
Tennessee? All recommendations of former Conferences adopted.
Texas: Calendar and fiscal year coincide. Uniform system now being installed.
Utah: Calendar and fiscal year coincide. Roster made up on March 1.
Vermont: Has adopted all recommendations of the Conferences.
West Virginia: Calendar and fiscal year coincide.
Wisconsin: Has adopted all recommendations of previous Conferences.
Wyoming: Calendar and fiscal year coincide.

The reports from the various secretaries show clearly that practical uniformity in method and results with consequent uniformity in necessary details is gradually becoming prevalent throughout the organization. All of the executive officers of the different parts of the associations have recognized the importance of sufficient uniformity to reduce correspondence and "red tape" on membership matters to a minimum. The general adoption of the calendar year as the fiscal year of the State Societies has alone been of great service in bringing about a better condition in membership regulation. Those who have been interested in this subject for a number of years past will recall that when this committee was appointed in 1908, only twenty-two of the constituent State Associations had a fiscal year corresponding to the calendar year. Today, practically all of them have adopted this plan. In the first report of the committee presented to the House of Delegates in 1909, after reviewing the situation in the different states, the committee said, "If the fiscal year is changed in all cases to coincide with the calendar year, then the reports of the Secretaries, Treasurer's Board of Trustees, etc., will be for the entire fiscal year immediately preceding the annual session at which the report is made. * * * The advantages of having the fiscal year and calendar coincide are obvious. * * * If the County, State and American Medical Associations all adopted the calendar as the fiscal year, membership throughout the organization would expire simultaneously and there would be no overlapping."

Your committee feels gratified at the general adoption of this primary and fundamental provision for uniform regulation.

The second recommendation, regarding the time at which County Secretaries should report and the time when the per capita assessments should be paid, is really a practical problem of administration. It makes little difference what time is agreed upon, so long as there is reasonable uniformity in the different states so that the membership records can be revised throughout the organization at approximately the same time. The question of uniform blanks as well as the exact form of blank which should be used is also unessential so long as the various state associations recognize the general principle that uniformity in essentials is desirable for the proper conduct of the organization as a whole. Your committee feels that its efforts during the past five years have been productive of benefit, largely through the fact that it has endeavored to present the situation to the various state associations without any effort at coercion or pressure and to secure the broadest possible discussion as to the best methods to be adopted. Our organization is still far from perfect in its mechanical details. There is still far too much indefiniteness, uncertainty and confusion in the regulation of membership. We still have too much routine correspondence between county and state secretaries and between state secretaries and the Secretary of the American Medical Association. Improvement in these conditions will come as the executive officers of the various parts of our organization come to realize more and more the need of simple, automatic and easily handled methods for the regulation of membership.

The committee recommends that it be continued and given further time in which to develop practical and effective uniformity. Respectfully submitted,

Thomas McDavitt, Chairman.

REPORT OF THE COMMITTEE ON CANCER

To the Council on Health and Public Instruction:

In 1912 the Clinical Congress of Surgeons of North America at their New York meeting realizing that it was absolutely necessary to educate the public as to the ravages of cancer and to point out to them that a large percentage of patients can be cured by early operation undertook a campaign for which they procured the cooperation of the daily press and weekly and monthly magazines. This committee was fortunate in enlisting the support of Samuel Hopkins Adams who wrote several comprehensive and lucid articles on the subject. The value of the publicity campaign soon became apparent. The knowledge that cancer in the beginning is a local process and not a blood disease, and that in the early stages the chances of its complete removal are good, induced many patients, especially those suffering from breast, lip or uterine cancer, to consult a physician early enough to ensure the best results.

The first annual report of the Cancer Campaign Committee of the Congress of Surgeons left absolutely no doubt as to the great good that can be accomplished by this method of enlightening the public on what can be done by early cancer operations.

It was not long before the laymen commenced to take an interest in the subject and in May 1913 the American Society for the Control of Cancer was launched, the membership including well-known laymen and representative medical men from all parts of the United States. It is expected that this society will be the clearing house for the dissemination of the newer knowledge concerning cancer.

The Council on Health and Public Instruction of the American Medical Association had for some time realized the necessity of having a committee on cancer. When the question came up for discussion Dr. Frederick R. Green, the Secretary of the Council, voiced the general sentiment when he said that the number of philanthropic societies in the United States was already too great and that they were overlapping one another, and hence a loss in potential energy was resulting. Following this line of reasoning the council in the appointment of its cancer committee selected men who were already members of the Cancer Campaign Committee of the Clinical Congress of Surgeons, and also of the American Society for the Control of Cancer. The Council Cancer Committee, consisting of Drs. Joseph C. Bloodgood, C. J. Miller, F. F. Simpson, H. C. Taylor and Thomas S. Cullen, appointed in November, 1913, has thus far limited its individual activities to securing a series of authoritative and popular articles on the subject of cancer. These are to be printed by the Association and will be distributed to any one desiring information relative to cancer. Articles on the following subjects are being prepared by competent authorities.

Cancer of the Skin.
Cancer of the Breast.
Cancer of the Stomach.
Cancer of the Uterus.
Cancer of the Genito-Urinary Tract.
Malignant Diseases of the Bone.

To these will shortly be added an article on cancer of the rectum and others dealing with the rarer varieties of malignant processes.

To any one interested in the betterment of the public health and in the subject of cancer we would urge that he first get a bird's eye view of the whole subject from Samuel Hopkins Adams, "The Health Master," a book that should be read from cover to cover not only by every physician, but by every man and woman who understands the English language—and that he then write Dr. Frederick R. Green, Secretary of the Council on Health and Public Instruction of the A. M. A., 535 North Dearborn Street, Chicago, asking for literature on the particular variety of cancer about which he needs special information at any given time.

Only a few years ago the public knew very little about appendicitis. Now the patient and his friends need not be told that an operation is necessary; they know it just as soon as appendicitis is diagnosed. They are already interested in the subject of cancer and are clamoring for more details. Every physician should read these carefully prepared articles published by the American Medical Association. It will enable him to do a lot of valuable missionary work in his individual community and will enable him to promptly answer any questions that may be asked him relative to cancer.

The number of cancer patients coming early for operation is already rapidly increasing. There is absolutely no reason why every man and woman in the land should not, within the next five years, have a clear knowledge of the fact that early cancer can be cured by the knife and furthermore that any suspicious symptoms should at once be reported to the family physician. Your committee asks the hearty cooperation of every member, without exception, of the medical profession in this important work.

Respectfully submitted,

THOMAS S. CULLEN, Chairman.

REPORT OF THE COMMITTEE TO CONFER WITH THE NATIONAL EDUCATIONAL ASSOCIATION

To the Council on Health and Public Instruction:

Your committee appointed by the Council on Health and Public Instruction to confer with the committee selected by the Council of the National Educational Association to improve instruction in sanitation, hygiene, physiology and kindred sciences in the rural public school as well as the environment of the rural public school, begs to submit the following report:

At the meeting of the committee at Salt Lake City during the fifty-first annual convention of the National Educational Association, July 5-11, 1913, they carried out the suggestions made at the St. Louis meeting (February, 1912). Your committee had arranged with Dr. W. B. Ewing, secretary of the Utah State Medical Association, to enlist the support of the Utah State Medical Association, and especially the physicians of Salt Lake City. The medical fraternity of the city of Salt Lake and the state of Utah responded most heartily, as indicated by the following letter from Dr. Ewing:

> During the recent meeting of the National Educational Association, at your suggestion, I was able to arouse some interest among the profession in this city in the various papers and discussions on health topics. As nearly as could be the various departments were apportioned and various medical men asked to attend and take part in the discussions or do anything else that would show their interest in the work, and desire to help in so worthy a cause. Among those who attended may be mentioned Drs. Hosmer, Bascom, Carter, Kahn, Beatty, Snow, Irvine, Gowens, Tyndale and Ashley. Several non-medical attendants were present, such as visiting nurses, inspectors of City Board of Health, librarians, etc. Many of us, myself among the number, regret that many of the meetings were at an hour when some could not be present on account of office work.
>
> I am very glad to see the determined stand the American Medical Association has taken in this work and feel that ultimately it will be given such an impetus that it may then be left in the hands of the National Educational Association and we can take up some other line of work.

Your committee replied:

> I beg to acknowledge receipt of your letter of the 11th inst., and personally as well as officially wish to thank you and all the members of your staff most kindly for the efforts in this matter. I shall report this to Secretary Green and your letter will form a part of my annual report to the American Medical Association. I feel that much was accomplished in Salt Lake and with a little effort on the part of the medical profession that we shall soon have the whole matter launched sufficiently for it to continue without special effort of the National Educational Association. Later we shall turn our attention to other matters of equal importance. Will you kindly extend to all the members of your staff my deepest thanks for their valuable aid.

Many meetings were held by the committees while in Salt Lake. Lectures and talks were given by the following: Drs. Favill, Wood, Ewing and Corwin; Commissioner Claxton, Messrs. Winship and Shawan, and others at the meeting of the Council and at various sections during the convention.

Photographs of rural schoolhouses, interior and exterior views, of outbuildings and of grounds, were exhibited, many illustrating the sad need of a more careful sanitary inspection, others showing indifference and some proving positive ignorance.

The following needs were especially dwelt on by the committees: better architectural and sanitary standards; more

assistance from states; better education of rural schoolteachers, county superintendents and rural school supervisors, in the principles and practice of school hygiene and sanitation; instillation in rural schoolchildren of interest in, and enthusiasm for, improvement and care of all features in school and surroundings which affect health and happiness; popular education from reliable sources on health information in the public press, and public lectures on health topics.

The committees passed a resolution asking that more information be obtained regarding the hygienic and sanitary conditions of rural school environment, and also regarding the instruction given by schools on sanitation and kindred subjects.

Dr. Henry B. Favill gave a most excellent address on conditions existing in our public schools, needs required and complexities interfering with improvements. A full report appears in the official report of the meeting of the National Educational Association for 1913.

We beg to thank Dr. A. E. Winship for his excellent address and his able assistance given through his admirable journal.

It would make this report too long to give in full the minutes of the meetings and addresses.

During the year your committee planned for the Richmond meeting of the National Council of Education and Superintendence of the National Educational Association.

At Richmond, Va., Feb. 23, 1914, the committees made their report in accordance with the resolution passed at Salt Lake City. At this meeting Dr. Thomas D. Wood made a complete and graphic report of the result of the committee's investigations of rural school conditions throughout the country. It was suggested that from the comprehensive data collected, an abstract be made setting forth minimum requirements which might be circulated immediately, and that later a full report be published as a reference book.

From these data were brought out, at the general meeting on the evening of February 23, when there were several thousand members present, the following facts:

Country schoolchildren are more unhealthy than the city schoolchildren. Whenever urban and rural statistics were compared, the country children were found to be anywhere from 5 to 20 per cent. more defective than the city schoolchildren, in spite of all sanitary deficiencies of the slums of the largest and most crowded cities, and all the benefits that country life is supposed to bestow.

From surveys made, results were amazing.

Out of 1,831 rural districts of Pennsylvania, 75 per cent. of 294,427 children need medical treatment.

Of New York's 287,469, 72 per cent. need medical treatment.

COMPARISON OF LUNG TROUBLE AND MALNUTRITION IN CITY AND COUNTRY CHILDREN

	City, Per Cent.	Country, Per Cent.
Lung-trouble	1	3.7
Malnutrition	23.3	31.2

ILL HEALTH OF COUNTRY CHILDREN COMPARED WITH CHILDREN IN TWENTY-FIVE CITIES

	City, Per Cent.	Country, Per Cent.
Mental defect	.2	.8
Heart-trouble	.5	1.
Spine curvature	.13	3.5
Ear-defects	1.	5.
Eye-defects	5.1	21.08
Adenoids	8.5	21.5
Diseased tonsils	8.8	30.

This in a general way gives an idea of the conditions found in the city and country, and the apparent advantage which the urban school has over the rural school. Further investigations may require some modification of these figures, but without question there is a decided need of sanitation in the rural school districts.

The report was received with much surprise and interest, and the doctor was required to answer many questions.

Following Dr. Wood's address, an address by Dr. R. W. Corwin was given on the advantages of the unit school which have been thoroughly worked out at Pueblo. The Unit School pamphlet, model and drawings were exhibited. At the conclusion of this address, interest was on tiptoe, and critics for and against the unit plan were besieging the chair for an opportunity to speak. Among those leading the opposition were Supt. Ella Flagg Young and Mrs. Treadwell of Chicago. Dr. A. E. Winship, who has frequently visited the schools of Pueblo and knew the advantages of the unit plan, spoke in favor of this plan of buildings.

After a most interesting discussion and the asking of many questions by those throughout the audience, President Aley called on Superintendent Keating of Pueblo to speak on the subject of the unit plan. Mr. Keating took the floor and presented the advantages of the unit plan as experienced by him, as superintendent of schools at Pueblo, where the plan has been in vogue for twenty years. His remarks were so convincing that no further questions were asked, but the many demands for the Unit School Pamphlet exceeded the supply.

Dr. Winship offered to publish in the *Journal of Education* the minimum requirements for the rural school; also it was suggested that Commissioner Claxton lend his assistance in obtaining permission from the government to publish and distribute the pamphlet containing minimum requirements. We have recently learned that Commissioner Claxton is hoping to print and circulate through the government Department of Education 50,000 copies of the "Minimum Requirements."

At its final meeting the committee further suggested that each member strive to arouse public sentiment throughout the Union, along the lines of bettering rural school conditions and to endeavor to secure the aid of the educational and medical journals and local papers.

At New York, from March 1 to 15, 1914, several meetings were held by the chairmen of the two committees, arranging and planning for another year. March 20, 1914, a meeting was held in Chicago by Drs. Green, Dodson and Corwin who reviewed the work at Richmond and suggested further means of disseminating general information in hygiene and sanitation to the laity and special instruction to the pupils of the schools.

Respectfully submitted,

R. W. Corwin, Chairman,
John M. Dodson,
M. J. Rosenau.

Report of the Committee on Expert Testimony

To the Council on Health and Public Instruction:

Your committee have had under consideration the questions relating to expert medical testimony for the past three years. A comprehensive survey of the entire field has been attempted, and a special effort made to glean from the mass of criticism of present methods and proposed changes, some constructive propositions.

The committee early reached the conclusion that any invasion of the province of the jury or limitation of cross examination would be impracticable with our institutions and judicial procedure. The appointment of official experts was also deemed inadvisable.

An examination of medical opinion testimony shows that it can be divided into two classes: First, that which is based on a first-hand knowledge of the facts and the opinions that are based on them; second, opinion testimony predicated on a statement usually in the form of an hypothetical question of evidence already introduced. It is evident that these classes are essentially distinct though under present methods they are usually associated. The recognition of this distinction we believe is fundamental in dealing with this subject.

In practice there would be no restriction in the admission of testimony from physicians who had some knowledge of the facts. The examination of a patient, an autopsy or other inquiry could be described and the opinions which could be legitimately arrived at from this data could be stated. Such testimony to be restricted to an opinion based on data within his own knowledge.

The second class will deal with opinion evidence based on the recital of evidence already introduced, and where it is necessary to enlighten the jury. No such witness should be called by the party who examines him, but he must be summoned by the court, and his compensation fixed by the

court and either taxed as part of the cost of the case or assessed against the party requesting the testimony.

It is believed that the distinction outlined will cure many of the serious objections to the present system. It will do away with the too frequent summoning of experts when there is no need of opinion testimony. It will get an expert in court with at least some show of fairness. It cannot be said that he was summoned by the party who employed him.

Your committee have discussed these propositions before joint meetings of lawyers and physicians. So far no valid objection has been advanced against the proposed changes. At the next meeting of the Council on Health and Public Instruction the committee will present a draft for a bill that will with few alterations meet individual situations in the several states.

Nothing in the statutory changes presents the adoption of the Leeds plan of having the experts in a given case consult in arriving at an opinion. The Monroe County plan, by which men especially qualified in certain fields, are named by the local medical society supplements the statutory changes here suggested.

Respectfully submitted,

HAROLD N. MOYER, Chairman.

Dr. G. Lane Taneyhill, Maryland, Chairman, presented the report of the Committee on Memorial to the Medical Officers Who Lost Their Lives in the Civil War, as follows:

Report of the Committee on Memorial to the Medical Officers Who Lost Their Lives in the Civil War

To the Members of the House of Delegates of the American Medical Association:

The other members of this committee beg leave, in sincerity, to pay a tribute to the memory of their esteemed chairman, Dr. S. Weir Mitchell, who at the age of 84 passed peacefully to rest early Sabbath morning, Jan. 4, 1914. As was said of Goldsmith, "He was at once physician, poet and natural philosopher." It was this popular writer, lecturer and savant who, in reading a paper before the Medical and Chirurgical Faculty of Maryland, where many old surgeons were present, a few years since, remarked that the surgeons of both armies who lost their lives in the Civil War deserved a monument for their noble services in the performance of a duty to a common humanity. The idea was at once taken hold of by a member of this committee, who submitted propositions to the House of Delegates of the American Medical Association which were heartily endorsed and subsequently pushed forward. But through the death of our chairman and other unexpected incidents, fate seems against the accomplishment of the desired result under the present directorate.

During part of the past year the enforced absence of one of our members in Africa, and since his return his arduous duties as Surgeon-General of the United States Army, have prevented any active service by him on the committee. The chairmanship has been declined by another member on account of other burdensome work already imposed on him.

Considering the foregoing and the inability at this late date of the committee to secure a willing and satisfactory surgeon who served in the Civil War and is at present a member of the American Medical Association to fill the vacancy in the Central Committee of five, and the difficulty of carrying out the original plan of a General Committee of one from each state has led your Central Committee reluctantly to ask the House to receive the foregoing explanation as their final report and to discharge this special committee from further consideration of the subject.

Your committee hopes that the meritoriousness of the project will, some time in the future, be impressed on younger hearts, and that they will be able to prosecute it to a final consummation.

Respectfully submitted,

G. LANE TANEYHILL, Secretary.
WILLIAM C. GORGAS,
W. W. KEEN,
G. B. THORTON.

Dr. Arthur T. McCormack, Kentucky, moved that the report be spread on the minutes of the House of Delegates; that the thanks of the House be extended to the members of the committee for their services, and that the committee be discharged. Motion seconded and carried.

Dr. A. L. Brittin, Illinois, Secretary, presented the report of the Committee to Consider Mode of Commemoration of the Completion of the Panama Canal, which was referred to the Board of Trustees.

Report of the Committee to Consider Mode of Commemoration of the Completion of the Panama Canal

To the Members of the House of Delegates of the American Medical Association:

The committee appointed by the American Medical Association to consider the mode of commemoration of the completion of the Panama Canal met in joint session with a committee of the Trustees of the American Medical Association at the headquarters of the Association, 535 North Dearborn Street, Chicago, Feb. 26, 1914, at 10 o'clock in the morning. Present at this meeting were J. H. White, U. S. Public Health Service, chairman, at whose call the meeting was held; Jefferson R. Kean, U. S. Army; J. Leaming Wiggins, East St. Louis, Ill., and Albert L. Brittin, Athens, Ill.; the Committee; and from the Board of Trustees, F. J. Lutz, St. Louis, and Oscar Dowling, Shreveport, La. J. H. White was elected chairman, and Albert L. Brittin was chosen secretary of the joint committee.

After full discussion of the subject under consideration, the joint committee submitted the following report and recommendation to be presented to the House of Delegates of the American Medical Association at its next meeting, to be held at Atlantic City, June, 1914.

The joint committee recommends that a monument be erected, to be financed by the American Medical Association, possibly with government aid, located on the Canal Zone at a point to be chosen by the Secretary of War. This monument is to be commemorative of the contributions of the American medical profession to preventive medicine and sanitary science. Designs of the monument submitted by artists should be a figure symbolic of the triumph of science over disease. These designs are to be submitted to the chairman of the joint committee. The names of those men whose work was essential to the attainment of the sanitary condition, which made possible the construction of the Canal, are to be inscribed on the base. These names are to be selected later by the joint committee. This monument is to be dedicated by the American Medical Association on the Canal Zone, not more than two weeks before the meeting of the American Medical Association, presumably to be held in San Francisco, in 1915.

The joint committee further recommends that the House of Delegates of the American Medical Association, at this meeting, request the Board of Trustees to appropriate a sum of money, not less than $30,000, for the monument. It was further resolved that it is the sense of this committee that the Panama-Pacific exposition management be requested to set aside a day during the exposition, to be designated as Honor Day, in recognition of the services of the men, living or dead, who by their contribution to sanitation and preventive medicine have made feasible the construction of the Canal, and that on that day a general session of the American Medical Association be held, which shall be open to the public.

It was unanimously agreed by the joint committee that Albert L. Brittin, secretary of the joint committee, shall present this communication to the House of Delegates at the proper time during the next session of the Association.

Respectfully submitted,

JOSEPH H. WHITE, M.D., Chairman,
ALBERT L. BRITTIN, M.D., Secretary,
J. L. WIGGINS, M.D., of Committee, and
OSCAR DOWLING,
W. W. GRANT,
FRANK J. LUTZ,
of the Board of Trustees.

It was moved that the reports of the Committee on Scientific Research and the Committee to Advise with the British Medical Association Regarding a Joint Meeting with the American Medical Association be received as printed in the Handbook and referred to the Board of Trustees.

Motion seconded and carried.

The House of Delegates having completed the docket for the day, President Witherspoon said:

"It now becomes my duty, as your retiring president, to close this meeting and to declare the House of Delegates adjourned. It is with a great deal of pleasure that I have been with you, and with regret I leave you." (Applause.)

The House of Delegates then adjourned until 2 p. m., Tuesday, June 23.

Third Meeting—Tuesday Afternoon, June 23

The House of Delegates met and was called to order at 2 p. m. by the President, Dr. Victor C. Vaughan, Ann Arbor.

On taking the chair President Vaughan said:

"I consider it the highest honor of my life to preside over the House of Delegates of the American Medical Association. I know the temper, the intellectuality and the motives of the members of this House, and I hope to give you my best service, and that what we may do will result in good for the forward movement of our profession. (Applause.)

The Secretary announced a quorum present.

The minutes of the previous meeting were read and approved.

Dr. D. Chester Brown, Connecticut, Chairman, presented a supplementary report from the Committee on Credentials.

A supplementary report from the Council on Health and Public Instruction was made by Dr. Frederick R. Green, Secretary of the Council, calling attention to a report on rural school health problems prepared by a joint committee of the National Educational Association and the American Medical Association.

Dr. Green then placed copies of this report in the hands of the members of the House.

Dr. W. T. Councilman, Chairman of the Board of Trustees, reported for the Board as follows:

Supplementary Report of Board of Trustees

The Board of Trustees has received a communication from the Medico-Legal Protective Association of New York, and a representative of that association, Mr. William L. Brown, is present and would like to present matters connected with this association to the House of Delegates if it is the desire of the House to hear him.

The Board of Trustees refers this matter to the House of Delegates without comment.

Mr. Brown has suggested to the Board that it might be desirable to have Mr. W. J. Burns present the matter to the House.

There is another matter which came before the Board of Trustees, which will be presented by Dr. M. L. Harris, Secretary of the Board.

Dr. James W. Fleming, New York, moved that Mr. Brown be invited to address the House, and that his time be limited to five minutes.

The motion was seconded and carried.

Dr. Harris, Secretary, reported further for the Board:

The Board of Trustees has received a communication from one of the Fellows, requesting that the Association be custodian of the patent rights of an instrument which he desires to have patented in order that the instrument may be protected both with regard to the form of the instrument and the standard of material and work in its manufacture. The patentee desires no remuneration whatever from the use or sale of the device, but wishes to have the instrument manufactured at the lowest possible cost to the members of the profession consistent with the production of a reliable instrument.

The Board of Trustees has considered this matter and approves of it. The Board believes it is desirable for the Association to provide some means by which it can assume and censor the manufacture and marketing of such instruments.

The Board of Trustees refers this matter to the House of Delegates and recommends that it be received and referred to the Judicial Council, and that, if possible, the Judicial Council report at this meeting as to the practicability of accepting such patent rights.

Dr. Arthur T. McCormack, Kentucky, moved that the matter be referred to the Judicial Council with the request that the Council report during the session, if possible.

Motion seconded and carried.

Dr. H. Bert Ellis, California, Chairman, presented the report of the Reference Committee on Medical Education, as follows:

Report of Reference Committee on Medical Education

Your Committee, to which was referred the report of the Council on Medical Education, report as follows:

It is recommended that the House of Delegates endorse the report as a whole and particularly Sections III and IV on page 132 in which state licensing boards are urged to make a hospital internship compulsory on those who are to obtain the license to practice medicine; this requirement to apply to all students matriculating in medical colleges on and after Jan. 1, 1915; it is further recommended that the Council urge the medical colleges to approve of this requirement and request its adoption by the licensing boards of their respective states.

It is recommended that the House of Delegates reiterate its action taken two years ago — that the courses in physics, chemistry and biology included in the preliminary science year must be of college grade; that this preliminary science year must be preceded by four years of work of high school grade; and that "high school" courses as ordinarily understood be not accepted in these subjects in lieu of college courses.

The action of the Council in seeking the advice of experienced clinical teachers in regard to the needed reorganization of clinical teaching is approved.

The changes in the ratings of medical colleges, made by the Council on Medical Education during the past year, are approved.

The attitude of the Council toward certificates issued by postgraduate medical schools is endorsed, and the Committee recommends that the House of Delegates instruct the Council to make such recommendations as will properly safeguard the issuing of those certificates.

In addition, your Committee recommends that the Council be instructed to grant no rating higher than Class C, hereafter, to any medical college operated as a stock corporation in the interests of the stockholders.

Your Committee also recommends that the Council be instructed to urge all medical colleges to adopt the nomenclature of the Pharmacopeia of 1910 and to use the metric system in their teaching.

The Committee is impressed with the remarkable improvements brought about in medical education during the past ten years as summarized in the report, and wishes to congratulate the Council on the progress made.

Respectfully submitted,

F. B. LUND,
ADOLPH KOENIG,
C. D. SELBY,
W. H. SANDERS,
H. BERT ELLIS, Chairman.

On motion of Dr. J. W. Andrews, Minnesota, which was duly seconded, the report was taken up seriatim.

On separate motions, which were duly seconded, each of the several sections was adopted.

Dr. A. R. Mitchell, Nebraska, moved that the report be adopted as a whole.

Seconded and carried.

The report of the Reference Committee on Amendments to the Constitution and By-Laws was called for.

The Chairman, Dr. W. A. Jayne, asked that the report be passed until after the report of the Reference Committee on Reports of Officers.

Report of Reference Committee on Reports of Officers

Dr. Thomas D. Davis, Pennsylvania, Chairman, read the report of the Reference Committee on Reports of Officers, as follows:

We recommend that the item concerning a new Section on Gastro-Enterology and Proctology be referred to the Committee on Sections and Section Work.

That the resolution from the secretaries of sections be referred to the Committee on Sections and Section Work.

That the resolution from the Medical Society of the State of New York and the communications from the New York Component Society be referred to the Committee on Legislation.

On motion of Dr. G. Lane Taneyhill, Maryland, duly seconded, the latter was spread on the minutes of the House.

That the amendment to the By-Laws be referred to the Committee on Constitution and By-Laws.

That the Principles of Medical Ethics be referred to the Committee on Constitution and By-Laws.

That Affiliate Fellowship for aged Fellows be referred to the Committee on Constitution and By-Laws.

That the coordinating branches of the organization be referred to the Committee on Constitution and By-Laws.

That the item concerning invited guests be referred to the Committee on Constitution and By-Laws.

On motion, duly seconded, the various items were referred to the committee named.

Dr. Henry B. Favill, Illinois, read the following letter, addressed to the Association:

To the Members of the American Medical Association:

The Social Service Commission of the Philadelphia Conference of the Methodist Episcopal Church in session this day in the city of Philadelphia do hereby express our sympathy with and hearty commendation of the high ideals of public health and morals presented by the members of the American Medical Association in the churches of this city on Sunday, June 21. Creating in the Christian conscience a responsibility for the health and physical condition of all humanity, and especially for those least able to protect themselves is certainly a movement in the spirit of Christian brotherhood. We believe that such a gospel truly hastens the Kingdom and is a true ministry to mankind.

REV. JOHN WATCHORN, Secretary.

On motion, which was duly seconded, this communication was received and ordered spread on the minutes.

Report of Reference Committee on Amendments to the Constitution and By-Laws

Dr. W. A. Jayne, Colorado, Chairman, read the report of the Reference Committee on Amendments to the Constitution and By-Laws, as follows:

Your Committee respectfully recommends that the following changes be made in the Constitution and By-Laws of this Association:

That the amendment proposed by the Reference Committee on Amendments to the Constitution and By-Laws, at the 1913 Session, and held over under the Constitution, be adopted, by striking out the words "scientific session" and substituting therefor the words "scientific assembly," in Article III.

That the By-Laws be amended as follows:

That the second paragraph of Section 4, Chapter IV, be amended to read:

Nominations for Affiliate Fellowship shall be made by the Council of the constituent association of which he is resident, and those for Honorary Membership by the sections, and must be submitted to the House of Delegates not later than the second day of the Annual Assembly.

That the second paragraph of Section 4, Chapter VII, be amended to read:

The judicial power of the Association shall be vested in the Judicial Council, whose decision shall be final. This power shall extend to and include (1) all controversies arising under this Constitution and By-Laws to which the American Medical Association is a party; and (2) controversies (a) between two or more recognized constituent associations, and (b) between the constituent association and the member (or members) of another constituent association (or other associations), or component societies thereof; (c) between members of different constituent associations. In all these cases the Judicial Council shall have original jurisdiction.

Strike out No. 3—reading "In all cases," etc.—and substitute the following:

In all cases which arise between a constituent association and one of its component societies; between component societies of the same constituent association; between a member of a constituent association and the component society to which said member belongs; or between members of different component societies of the same constituent association, the Judicial Council of the American Medical Association shall have appellate jurisdiction.

The constituent associations herein referred to are those defined in Article 4 of the Constitution, and the component societies are the county or district medical societies which unite to support and maintain the several constituent associations.

The Judicial Council may, at its discretion, investigate general professional conditions, and all matters pertaining to the relations of physicians to one another and to the public, and shall make such recommendation to the House of Delegates and the constituent associations as it deems necessary.

That in the thirteenth line of Section 8, Chapter VII, the words "and county" be stricken out.

That to Clause 6, Section 11, Chapter VII, there shall be added (in parentheses):

The members of the Judicial Council shall be members, *ex officio*, of this Committee.

That in the first line of third paragraph of Section 4, Chapter VIII, the word "Affiliate" be inserted, so that it shall read:

"There shall be Affiliate, Associate, and Honorary Fellows, who shall be elected," etc.

That to the present Section 5 (Tenure of Fellowship), Chapter VIII, there be added the following paragraph:

Fellowship shall be further conditioned on a Fellow conducting himself in accordance with this Constitution and By-Laws, and Principles of Medical Ethics of this Association.

That a section be added to Chapter VIII, and numbered Section 5, and read as follows:

AFFILIATE FELLOWSHIP.—A Fellow who has been a Fellow for a continuous term of fifteen (15) years, who is not less than sixty-five (65) years of age, and who is an honorary member of his component society and of his constituent association, or is connected with these organizations in an equivalent manner whereby he is relieved from the payment of dues or fees, on request of the Council of his constituent association may be made an Affiliate Fellow by a majority vote of the House of Delegates of this Association. Affiliate Fellows shall be privileged to participate in the Scientific Assembly of the Association; they shall not be required to pay fellowship dues and shall not receive THE JOURNAL of the American Medical Association except by personal subscription. Affiliate Fellowship shall be conditioned upon such an Affiliate Fellow continuing the relationship with his constituent association herein defined.

That the present Section 10, Chapter VIII, be numbered Section 8, and read as follows:

SEC. 8. INVITED GUESTS.—Scientists resident in the United States who are not engaged in the practice of medicine, and eminent physicians and scientists from foreign countries, may be invited by the general officers or by the officers of a section, to attend an annual assembly and participate in the scientific work and social functions. They shall be designated as invited guests.

That the sections in Chapter VIII be renumbered as follows:

SEC. 5. AFFILIATE FELLOWSHIP.
SEC. 6. ASSOCIATE FELLOWSHIP.
SEC. 7. HONORARY FELLOWSHIP.
SEC. 8. INVITED GUESTS.
SEC. 9. TENURE OF FELLOWSHIP.
SEC. 10. DELINQUENCY.
SEC. 11. FELLOWSHIP RESTORED.

That there be inserted in the first line of Chapter IX the word "Affiliate," so that it shall read:

"None but Fellows, Affiliate, Associate, and Honorary Fellows, and Invited Guests," etc.

That in line 4, Section 7, Chapter IX, the word "Affiliate" shall be inserted, and the word "and" stricken out, so that it shall read:

"Fellows, Affiliate, Associate, and Honorary Fellows, and Invited Guests," etc.

That in Section 13, Chapter XI, the second sentence be stricken out.

The Committee recommends that the Secretary be authorized to substitute the word "Assembly" for "Session" in these By-Laws wherever applicable.

The Committee further recommends that wherever in the By-Laws the term "annual dues" appears, that the words "annual Fellowship dues" shall be substituted.

The Committee likewise recommends that in the Constitution the word "Assembly" be substituted for the word "Session" wherever it may appear; and that under the rules it be held over for adoption at the next Annual Session of the House of Delegates in 1915.

Respectfully submitted,

W. A. Jayne, *Chairman,*
Floyd M. Crandall,
Charles Richard,
Perry Bromberg.

It was moved and seconded that the report be taken up seriatim. Carried.

On separate motions, which were duly seconded, each of the several sections was adopted, with the exception of the third paragraph of the proposed revision of Section 4, Chapter VII, defining the appellate jurisdiction of the Judicial Council, which was laid on the table until the next annual session, and the Secretary was instructed to refer this paragraph to the constituent associations for their consideration before final action is taken by the House of Delegates at the 1915 Session.

On motion, which was duly seconded, the report of the committee was adopted as a whole as amended.

At this juncture, Mr. William L. Brown was accorded the privilege of the floor, and spoke of the great increase in malpractice suits in recent years, and stated that, according to insurance statistics, very many of these suits were in the nature of blackmail, and were utterly unwarranted and malicious. It occurred to him that the House of Delegates would like to hear from Mr. William J. Burns on this subject, who had handled many cases of malpractice suits.

Dr. Arthur T. McCormack, Kentucky, moved that this matter be referred to the Judicial Council with power.

Seconded and carried.

Dr. William L. Noble, Illinois, stated that at the last meeting of the House of Delegates of the Illinois State Medical Society, the following resolution was adopted with but five dissenting votes and the Illinois delegates were instructed to present the same to the House of Delegates of the American Medical Association:

Resolved, By the House of Delegates of the Illinois State Medical Society, that we deplore the organization of the "American College of Surgeons" as violating the fundamental democratic principles on which the American Medical Association is based; be it further

Resolved, That our delegates to the American Medical Association be instructed to submit this resolution to the House of Delegates of the American Medical Association, and to use all honorable means to secure its adoption.

Dr. J. M. Baldy, Pennsylvania, moved that the resolution be tabled.

Seconded and carried.

Dr. William L. Noble, Illinois, submitted the following resolution:

Whereas, There has been chartered in the State of Illinois an organization known as the American College of Surgeons, whose avowed object is to elevate the standard of surgery and to indicate to the public and the profession that the surgeon possessing such a fellowship is especially qualified to practice surgery, and

Whereas, The American Medical Association has never taken any action which would indicate to the public and profession those members of its own organization who are especially qualified to practice surgery, and

Whereas, At this time the public has no other means of knowing who are competent to practice surgery, except as it is informed by the American College of Surgery, therefore be it

Resolved, By the House of Delegates of the American Medical Association that we heartily commend and endorse the organization of the American College of Surgeons, and that we recognize it as filling a long-felt want, which the American Medical Association has hitherto failed to meet.

On motion, which was duly seconded, the resolution was laid on the table.

Dr. Fred Lund, Delegate from the Section on Surgery, presented a communication from that Section, advising the House that the By-Laws were amended in 1912, changing the title of the "Section on Obstetrics and Gynecology" to the Section on "Obstetrics, Gynecology and Abdominal Surgery," without the knowledge of the Section on Surgery, and that now the Section on Surgery requests that the By-Laws be amended by striking out the words "and Abdominal Surgery" and inserting the word "and" between the words "Obstetrics, Gynecology," so that the title of the Section shall read as it formerly read, "Obstetrics and Gynecology."

Dr. C. E. Cantrell, Texas, moved that the amendment be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

Seconded and carried.

Dr. Henry F. Lewis, Illinois, offered the following resolution:

Whereas, The Appellate Court of Illinois rendered a decision which casts doubt on the legality of the corporate acts of the American Medical Association during recent years, and the text of the decision, vastly important to the members of the Association, has never been published in The Journal of the American Medical Association, and the Trustees have never satisfactorily explained the situation to the membership.

Resolved, That this House of Delegates believes that the questions involved are important enough to be made known to every member and Fellow of the American Medical Association; that the full text of the decision of the Appellate Court should be published in The Journal of the American Medical Association; that the Trustees should hasten, by all means in their power, a final decision by the Illinois Supreme Court.

Dr. E. J. Goodwin, Missouri, moved that the resolution be referred to the Reference Committee on Reports of Officers.

Seconded and carried.

Dr. Joseph E. Willets, Pittsburgh, presented the following in the Section on Ophthalmology, which was, by action of the Section, transmitted to the House of Delegates by the delegate of the section, Dr. Melville Black, Colorado.

The work of the Commission on Medical Expert Testimony, appointed by the Pennsylvania State Medical Society, has proved conclusively that the ethical members of both the legal and the medical professions are keenly alive to the necessity of some far-reaching action to preserve their honor and integrity, which are assailed by unprincipled attorneys in courts of justice every day, in every state.

The medical expert is handled on the witness-stand to-day in the identical way he was one hundred years ago, when men practiced medicine unlicensed and without diplomas. The obsolete court methods of to-day do not in any way conform to the present-day standard of the scientists, who were evolved from empirics; who stand, to-day, surrounded by the marvelous, almost miraculous, discoveries in medicine, and who deserve a generous gratitude for services nobly performed, instead of character assasination.

Each state medical society has its Committee on Public Policy and Legislation. The jurisdiction of this committee covers such subjects as medical expert testimony, conservation of vision, vaccination, vivisection, reform law, and new legislation, any one of which is a task in itself. In the aggregate the labors demanded become a physical impossibility for successful accomplishment—especially with the limited numbers constituting the Committee.

Whereas, It seems absolutely necessary to have concerted action by a wide organization of a national medical body, to correct the abuses which now exist under the present lax laws governing medical expert testimony; therefore, be it

Resolved, That the American Medical Association do hereby create a commission on medical expert testimony, to be known as the "Interstate Commission on Medical Expert Testimony," empowered to confer with the legal profession.

That the commission be composed of a national chairman and a representative medical man for each state.

That the policy of agitation of the subject by the Pennsylvania State Commission be adopted, wherein each member of this commission shall arrange for symposiums to be held in each county medical society of his state—members of the county bar association to be invited.

That the subjects of the "formulation of a stricter definition of medical expert testimony;" the "abolition of the hypothetical question;" and the "right of the trial judge to appoint, on his own initiative, an expert to act as an assessor or to suggest to him questions which might clarify conflicting testimony," be given special consideration.

That each member of the commission be furnished with the Association's stationery.

That an appropriation of $1,000 be made to cover the expenses of the work, as before outlined.

That the results of its work be embodied in a report, to be presented to this body at the next meeting.

That its findings be then referred to the Committee on Public Legislation and the Commission discharged."

Referred to the Reference Committee on Legislation and Political Action.

Dr. J. J. McGovern, Wisconsin, presented the following, which was referred to the Reference Committee on Legislation and Political Action:

WHEREAS, The report of the Committee on Expert Testimony indicates that a solution of that difficult problem has not been found, the report indicating clearly that no improvement is to be expected along the lines of state or national legislation; and,

WHEREAS, It is the duty of the medical profession to reduce, as far as possible, the number of members who are dishonest in their testimony before courts and juries; therefore, be it

Resolved, That the Committee on Expert Testimony be made a standing committee and that a similar committee be created in each affiliating state and county society. The duty of the various committees shall be to report to their respective societies, annually, and the committee of the county societies may report at any meeting of their respective county societies, on all testimony given by the medical experts before a court or jury in their respective districts with such recommendations as they see fit to make.

Proposal Concerning Preparation of Scientific Program

Dr. J. Shelton Horsley, Virginia, presented the following, which was referred to the Reference Committee on Amendments to the Constitution and By-Laws:

The sections of the American Medical Association have two distinct functions. The first is to produce scientific work and the second is to encourage and develop young men. The young man in medicine, surgery or any of the specialties should look forward to the American Medical Association as affording him an opportunity to place his work before the medical profession if it has any value. He cannot become a member of any special society until he has acquired some reputation; and unless he can feel that any work of merit by him will be afforded an opportunity to be placed before the medical profession, he really has no chance. As many of the sections are now conducted, it seems that only the most eminent are permitted to read papers, and the second function of the American Medical Association of encouraging and developing young men is neglected. The habit of filling the program with famous names does not invariably give the best work. In order to overcome these objections, I offer as a part of the By-Laws under Chapter XI the following:

SECTION 15. MANNER OF PREPARING PROGRAM OF THE SECTIONS.—The Chairman and Secretary of the Section may fill not more than two-thirds of the program of their Section by special invitation. The rest of the program must be filled from articles submitted to the Chairman or Secretary of any section, at least three months before the date of meeting. The Chairman and Secretary shall select from the articles submitted those that appear most meritorious and shall have full power to decide on the value of any article submitted.

Dr. M. L. Graves, Texas, presented the following preambles and resolution at the request of Dr. Albert Woldert, Alternate Delegate:

WHEREAS, The American Medical Association has for several consecutive years appointed a "Committee to Consider the Mode of Commemoration of The Completion of The Panama Canal," and

WHEREAS, At a joint meeting of the Board of Trustees and the Committee of the American Medical Association to Consider the Mode of Commemoration of The Completion of The Panama Canal, held in February, 1914, a resolution was adopted to have the House of Delegates request the Board of Trustees to appropriate the sum of Thirty Thousand Dollars ($30,000) for a monument to be erected to those physicians whose scientific work and discoveries subsequently made possible and practicable the building and completion of the Panama Canal, and

WHEREAS, Dr. Ronald Ross, Surgeon-Major in the British Army, was first to prove that insects (mosquitoes) are capable of carrying and transmitting disease such as malarial fever, this discovery being first made by him, Aug. 20, 1897, and about three years previous to the appointment of the American Commission to investigate the question of the transmission of yellow fever in Cuba, the members of which commission were first to prove that yellow fever is also transmitted by mosquitoes, and

WHEREAS, Science recognizes no nationality in the bestowal of deserved honors for discoveries made, and in honoring Ross, we do honor ourselves, therefore be it

Resolved, That the House of Delegates of this Association hereby request and instruct the proper committee in charge to insert and include the name of Ross among others to be commemorated by the erection of a monument in Panama under the auspices of the American Medical Association.

On motion of Dr. Arthur T. McCormack, Kentucky, which was duly seconded, the resolution was referred to the Board of Trustees.

Dr. S. W. S. Toms, New York, presented a request for the formation of a new Section on Hydrotherapy, which was referred to the Reference Committee on Sections and Section Work.

On motion, which was duly seconded, the House of Delegates adjourned until 2 p. m., Wednesday.

Fourth Meeting—Wednesday, June 24

The House of Delegates met at 2:15 p. m. and was called to order by the President.

The Secretary announced a quorum present.

The minutes of the previous meeting were read and approved.

Dr. D. Chester Brown, Connecticut, Chairman, presented a supplementary report from the Committee on Credentials.

A telegram was read from Henry C. Lovis, president of the National Association of Manufacturers of Medicinal Products, now in session at New York, extending greetings and best wishes.

Report of the Reference Committee on Amendments to the Constitution and By-Laws

Dr. W. A. Jayne, Colorado, Chairman, presented the report of the Reference Committee on Amendments to the Constitution and By-Laws, as follows:

At the meeting of the House of Delegates, held June 23, 1914, the delegate from the Section on Surgery presented a resolution asking that the By-Laws be amended so that in the third title appearing in Section 1, Chapter XI, the words "and Abdominal Surgery" shall be stricken out, making the title of the section "Obstetrics and Gynecology."

Your Committee recommends that Section 1, Chapter XI, of the By-Laws be amended by adding after the word "Surgery" in the second title, the words "General and Abdominal," making the full title read, "Surgery, General and Abdominal."

[It was moved and seconded that this section of the report be adopted. Carried.]

At the same meeting an amendment to the By-Laws was proposed; viz., to add the following Section to Chapter XI:

SEC. 15: MANNER OF PREPARING PROGRAM OF THE SECTIONS. The chairman and secretary of the section may fill not more than two-thirds of the program of his section by special invitation. The rest of the program must be filled from articles submitted to the chairman or secretary of any section, at least three months before the date of meeting. The chairman and secretary shall select from the articles submitted those that appear most meritorious and shall have full power to decide on the value of any article submitted.

After due and deliberate consideration, your Committee recommends that this proposed amendment be not adopted.

[Dr. Arthur T. McCormack, Kentucky, moved that consideration of this section be postponed until immediately after the report of the Reference Committee on Sections and Section Work. Seconded and carried.]

Respectfully submitted,

W. A. JAYNE, Chairman,
FLOYD M. CRANDALL,
CHARLES RICHARD,
PERRY BROMBERG.

Report of Reference Committee on Reports of Officers

Dr. Thomas D. Davis, Pennsylvania, Chairman, presented the report of the Reference Committee on Reports of Officers, as follows:

Your Committee commends the full report and the carefully compiled statistics of your Secretary, and notes with satisfaction the substantial net increase in Fellowships.

The resolution from the California Medical Association we recommend be referred for action to the Committee on Transportation and Place of Session.

In regard to the communication from a committee of the American Institute of Homeopathy, we recommend that as the said committee shows an evident desire to get at the scientific truth concerning their formula, and as there has been no favorable response from either of the three laboratories suggested by them, we recommend that our Secretary inform them of the result of his correspondence with these laboratories and that they be asked to suggest other laboratories, or some practical plan for investigation.

Your Committee is pleased to commend the faithful and extensive labors of your Board of Trustees as shown in their report.

We regret that the increased expense put on them by the action of this House last year has caused a marked decrease in our surplus, and we hope that there will be a decrease in the number of special committees, etc., this year.

We heartily commend the work of the Council on Pharmacy and Chemistry and believe it has accomplished great good for the profession and our citizens.

No more important work has been undertaken, nor none has accomplished more, than that done by the Propaganda Department. We cannot praise its work too highly and recommend its continuance on enlarged lines.

The various publications show an immense amount of labor and gratifying success. We especially note the issuing of the Fourth Edition of the American Medical Directory as a monument of patient investigation, with exceedingly accurate results. It should be in the hands of every physician at all interested in the general profession.

The Cooperative Medical Advertising Bureau fills a great want. It has done much already to raise the standard of the advertisement in state medical journals, and will be the means of securing more and better advertisements for them in the future, at more remunerative terms. We most heartily recommend its continuance.

As to the reserve fund recommended by the Board, there can be no doubt of its business acumen and we recommend that this fund be established as speedily as possible, and to this end we urge the House to be extremely careful concerning unnecessary or extravagant expenditure.

Your Committee most heartily commends the deliverance of the Judicial Council concerning advertising by Fellows of the American Medical Association. The principles of ethics should be observed not only to the letter, but also in the spirit. He who would delight to elevate himself by any such means above his brother practitioner is unworthy of fellowship in this Association, be the advertising covertly or openly done.

Your Committee heartily commends to this House for action the following resolution of the Judicial Council:

Resolved, That it is the sense of the House of Delegates of the American Medical Association that each county society should constitute a publicity committee whose duties shall be to give to the daily press accurate information on all medical matters of interest to the public, that this shall be freely given without the mentioning of names or from whence the information comes, and that this committee shall further act in an advisory capacity to all physicians of its society in questions relating to publications other than in the medical press. Be it further

Resolved, That the Secretary of the American Medical Association be instructed to forward this resolution, with the reasons calling for it, to the Secretary of each constituent state association, with the request that it be transmitted to each component society of that constituent association.

Concerning the resolution offered in the House by Dr. Henry F. Lewis of Chicago, we recommend that the decision designated be not published.

First, because our Association is only very remotely, if at all, concerned with the matter, and the room in our JOURNAL can be used for more valuable subjects.

Second, we commend our Editor and Trustees for not publishing it, because the case was still under consideration by a higher court, and no decision had yet been reached.

Third, it should not be published because the Supreme Court of Illinois, on Feb. 21, 1914, overruled the Appellate Court and decreed that the proper judgment had been entered in the Circuit Court, and therefore the Appellate Court's decision is of no value whatever, and not worth publishing.

Respectfully submitted,

THOMAS J. DAVIS, Pennsylvania,
A. R. MITCHELL, Nebraska,
ROCK SLEYSTER, Wisconsin.

The report was taken up seriatim, and on separate motions each section was adopted.

Dr. Arthur T. McCormack, Kentucky, moved the adoption of the report as a whole.

Seconded and carried.

Report of the Judicial Council

Dr. Alexander Lambert, New York, Chairman, presented the following report from the Judicial Council:

The Judicial Council desires to report on the matter referred to it by the House of Delegates, at the suggestion of the Board of Trustees, on the advisability of the American Medical Association holding, in trust, patents for medical and surgical instruments and appliances.

It has long been recognized (and the principles of ethics of the Association definitely state) that it is unprofessional to receive remuneration from patents for surgical instruments or medicines. The principle here promulgated is one which recognizes the fact that all physicians and surgeons should give to the world their best efforts in the endeavor, on the broadest plane, to benefit humanity; and that they should not hold themselves in a special class as receivers of special benefits for any instruments or appliances the excellence of which may benefit humanity. The wisdom of this time-honored tradition and the position taken in consequence of it by the medical profession is not to be questioned; but it has produced a condition which has been turned to the disadvantage of both the profession and the public. Commercial firms have, from a purely business point of view, taken instruments and appliances of real value, either had them patented, or have used the ideas and overcharged the profession (and, consequently, the public) for their manufacture and have substituted inferior products.

The question now before the Council is, "Shall physicians or surgeons, having patented medical and surgical instruments and appliances, be permitted to assign the patents thereof to the Trustees of the American Medical Association, to be held in trust, under the conditlon that neither the Association nor the patentee shall receive pecuniary remuneration therefor?" The advantages of this procedure would be as follows:

1. It would enable any advance in surgical or medical technic to be protected and kept in the hands and under the control of the profession.

2. It would prevent cheap and worthless imitations of these appliances or instruments being made and put on the market—often to the detriment of both the profession and the public.

3. It would keep the cost of these instruments and appliances down to within reasonable figures and within range that many men of moderate incomes could easily afford to use them and apply them in their daily work — where, heretofore, and under the exploiting system of commercial firms, this has been impossible for them to do.

4. It would permit (if considered wise) further improvements on these instruments without delay and without acrimonious dispute or lawsuits.

5. It would, it seems to the Judicial Council, establish a precedent that would benefit both the profession and the public.

Therefore, for these reasons, the Judicial Council recommends the following resolution:

Resolved, That the Board of Trustees of the American Medical Association shall be permitted to accept, at their discretion, patents for medical and surgical instruments and appliances and to keep these patents, as trustees, for the benefit of the profession and the public; provided, that neither the American Medical Association nor the patentee shall receive remuneration from these patents.

The Judicial Council desires to report, further, concerning the matter referred to it, with power, by the House of Delegates on Tuesday afternoon.

On investigation, it has been found that the gentleman who appeared before the House represented the Medico-Legal Protective Corporation of New York — this corporation being under the protection of the W. J. Burns International Detective Agencies. The scheme which the gentleman desired to place before the House of Delegates is as follows:

As is well known, W. J. Burns is the detective through whose agency are protected against criminality the Bankers' Association, the Jewelers' Association, the Canners' Association, and various other large business corporations. In recent years the criminal blackmailing malpractice suits brought against physicians has increased to such an extent that several large insurance companies writing defense against physicians malpractice suits have been forced to discontinue this form of insurance — the actuaries of these companies being unable to calculate the percentage and amount of criminality that has appeared in these suits. This does not refer in any way to the ordinary civil suits of malpractice in which there is a difference of opinion as to whether surgical or medical procedure was rightly or wrongly carried out; but it does refer to those cases of criminal hold-up brought against physicians, which, by outrageous accusation, the physician's reputation will suffer and he will do anything and pay anything to protect it and keep the matter from being publicly aired. This matter is not a question to be taken up by the House of Delegates of the American Medical Association. In the near future, this gentleman informed members of the Judicial Council, each physician would be personally solicited and an offer of protection given to him for a certain stated sum. It is a new form of cooperative insurance, on a definite commercial basis, which physicians may obtain to protect them-

selves against criminal malpractice suits. To each one of you, and to each one of the members of your various associations, this Medico-Legal Protective Corporation will offer this special form of insurance. The Judicial Council, therefore, considers that there is nothing further to be done in the matter and that each physician must decide for himself whether or not he wishes to consider the matter further. In the opinion of the Judicial Council, the matter does not properly come before the House of Delegates.

Dr. Thomas S. Cullen, Maryland, moved that the report be adopted.

Seconded and carried.

Supplementary Report of the Council on Health and Public Instruction

Dr. Henry B. Favill, Illinois, presented a supplementary report from the Council on Health and Public Instruction, saying that the Council had received a request from the National Child Labor Association for the passage of a resolution. The Council on Health and Public Instruction had drawn a resolution of its own on the subject which it wished to present to the House of Delegates for its approval.

WHEREAS, Many thousands of children under 16 years of age are employed in the United States in gainful occupations, under improper conditions, resulting in the impairment of their health and future well-being; and

WHEREAS, Nineteen States and the Congress of the United States, for the District of Columbia, have already enacted laws limiting the hours of labor for children under 16 years of age to eight hours a day, and prohibiting such children from working at night, or at dangerous occupations; now, therefore, be it

Resolved, By the American Medical Association, that we commend those states which have adopted legislation to protect children under 16 years of age from the disastrous consequences of unsuitable work and bad industrial conditions, and urge all other states to establish for the benefit of such children a work day not to exceed eight hours, and the prohibition of labor at night or in any hazardous employments; and to this end we recommend that all state medical societies affiliated with this association and the medical profession generally advocate the passage of such laws by the legislatures of their respective states; and be it further

Resolved, That we endorse the principles of the Palmer-Owen child labor bill now pending in Congress which seeks to place the said restrictions on the employment of children in this country by means of the federal power to control interstate commerce, and that we notify the sponsors of this measure in Congress of our action.

It was moved that the rules be suspended and that the resolutions be now adopted.

Motion seconded and carried.

Report of Reference Committee on Sections and Section Work

Dr. Hugh Cabot, Massachusetts, reported for the Reference Committee on Sections and Section Work, as follows:

Your Reference Committee on Sections and Section Work had before it three questions, namely:

1. The request for the formation of a Section on Hydrotherapy.

2. The request for the formation of a Section on Gastro-Enterology and Proctology without the limitations attached to it by the last House of Delegates.

3. The request from the Conference of the Secretaries of Sections to consider the advisability of dividing the sections into two groups—General Sections and Special Sections—and allowing a Fellow to present a paper in each group.

1. In regard to the formation of a Section on Hydrotherapy, your Committee feels that it need not consume your time in lengthy discussion, since these methods of treatment clearly belong to the department covered by the Section on Pharmacology and Therapeutics, and can be properly given due consideration in that Section.

2. In regard to the formation of a Section on Gastro-Enterology and Proctology, the question is far more complicated and difficult. In favor of the formation of such a Section, it is very properly urged that the interest in these questions has been sufficient to give rise to the formation of two societies of national scope, and that the number of Fellows who desire to present papers on these subjects is greater than can be accommodated by the sections already in existence.

It is further urged that such a section has already been partly organized, only to be held up because certain conditions were not complied with.

Against the formation of such a Section it is urged, with much force, that these are not well-defined specialties, and that it is not improbable that the swing of the pendulum might soon make the need of such a Section less urgent, if, indeed, it existed at all.

The American Gastro-Enterological Association (one of the two special societies existing in this field) has notified your Committee that it is not in sympathy with the formation of the proposed new Section, and that its members prefer to affiliate with the medical and other already existing sections.

And finally, we have the evidence that the Reference Committee of this body, last year, was unwilling to advise the creation of such a section, except the field be cleared by the disbanding of the existing societies and the number of papers be limited to fifteen.

The whole question of the creation of new Sections—no matter how meritorious—is more complicated than appears at first sight. There are already fifteen sections, for which meeting-places must be provided, stenographers engaged, and stationery printed, at a very considerable cost, and at a time when the Association has tremendous and ever-increasing demands on its finances. Of the fifteen sections, two—medical and surgical—collected (in 1913) to themselves 60 per cent. of the registration; and, of the remaining thirteen, none had 10 per cent. of the registration, and only two had over 1 per cent.; a showing from which it at once appears that the majority of the Sections which we already have attract but a small proportion of the Fellows and are carried on at a correspondingly large expense.

3. The third question before your Committee was the suggestion already referred to, that the Sections be divided into two groups, general and special, and that a Fellow be permitted to present a paper before each group. The two groups are as follows: 1. General: Practice of Medicine, Surgery, Pharmacology and Therapeutics, Pathology and Physiology, and Preventive Medicine and Public Health. 2. Special: Obstetrics, Gynecology and Abdominal Surgery, Ophthalmology, Laryngology, Otology and Rhinology, Diseases of Children, Stomatology, Nervous and Mental Diseases, Dermatology, Genito-Urinary Diseases, Hospitals, and Orthopedic Surgery. It will be remembered that it is only a year since the By-Laws were changed so as to prevent a Fellow from reading a paper before more than one Section. Already this regulation has proved too onerous. Clearly there are many and important considerations involved, a considerable proportion of which may not as yet come to the surface.

As further evidence that this question is complicated and difficult, we would remind you that there are also two other questions concerning the sections which have been referred to another committee.

These are some of the questions involved in the propositions which are before your committee, and they seem to us too many and too complicated to be satisfactorily solved, except after mature deliberation and much consultation and discussion. We believe that the time has come when the whole question of the division into sections and the apportionment of the work of the Association among the sections should be taken up in a comprehensive way.

We, therefore, recommend to the House of Delegates the creation of a committee of five, to be appointed by the President. This committee should be charged with the investigation of the whole matter of Sections and Section work, and should be required to report their findings and recommendations to the next House of Delegates.

On motion, which was duly seconded, the report and recommendations of the committee were adopted.

The Secretary presented a communication from the officers of the Section on Surgery, nominating for honorary fellowship Dr. Alexander Primrose of Toronto, which was referred to the Reference Committee on Sections and Section Work.

Dr. W. A. Jayne, Colorado, moved that the suggested amendment to the By-Law on the manner of preparing programs for the sections be not adopted at this meeting, but that the matter be referred to the special Committee on Sections and Section Work.

Seconded and carried.

Dr. William A. Pusey, delegate from the Section on Dermatology, presented the following preambles and resolution, which were referred to the Reference Committee on Hygiene and Public Health:

WHEREAS, Leprosy exists in many foci in this country and has been statistically shown to be on the increase, and

WHEREAS, Those afflicted with leprosy are being subjected to most inhuman treatment, and

WHEREAS, Many lepers are traveling in interstate traffic because of the inhuman treatment to which they are subjected, thereby constantly exposing the general public to the contagion, and

WHEREAS, It is the duty of the federal government to control traffic between states, and

WHEREAS, At the present time the care of lepers in the United States is a great economic burden on the individual states and is moreover of necessity inadequate from a medical and sanitary point of view, therefore be it

Resolved, That this Association recommends the passage by Congress of a law providing for the comprehensive care and control of leprosy by the Federal government.

Dr. Dunbar Roy, delegate from the Section on Laryngology, Otology and Rhinology, presented the following, which was referred to the Reference Committee on Hygiene and Public Health:

Whereas, hundreds of children are sacrificed each year by strictures of the esophagus caused by burns from lye and other household articles containing caustic preparations, the Section on Laryngology, Otology and Rhinology hereby requests that the House of Delegates urge some legislation for the proper labeling of all cleansing preparations of a caustic character, sold by grocers and other merchants.

Dr. William L. Spitzer, delegate from the Section on Genito-Urinary diseases, presented the following resolution from that section, which was referred to the special committee appointed at this meeting to consider the scientific work of the Scientific Assembly:

WHEREAS, On account of the lateness of their offering, from the surgical section, several papers on genito-urinary subjects failed to receive a place on our program at this meeting; therefore, be it

Resolved, That this section suggests that all papers dealing with especial genito-urinary surgical subjects be hereafter immediately referred to the Secretary of this section in order that they may be read in the section to which they properly belong.

Dr. E. E. Southard, delegate from the Section on Nervous and Mental Diseases, presented the following resolution, which was referred to the Reference Committee on Miscellaneous Business:

Resolved, That it is the sense of the Section on Nervous and Mental Diseases that the Council on Health and Public Instruction should be authorized, in accordance with the official rules governing such authorization, to consider and act on the advisability of (*a*) including mental hygiene among the public health problems which said Council is investigating; (*b*) taking steps to educate the public on all appropriate topics of mental hygiene, such as after-care of the insane, prophylaxis, through stimulation of the voluntary resort of psychopathic patients and their temporary care in appropriate institutions, heredity, eugenics, syphilis, alcohol, occupational diseases, environmental causes, and other well-established scientific data, said Council to use its press bureau, speakers' bureau, and bureau of literature to accomplish these ends; (*c*) establishing a subcommittee on mental hygiene, empowered to confer and, if desirable, to co-operate with official and voluntary organizations, such as the National Committee on Mental Hygiene, state committees on mental hygiene, both so far organized and those to be organized in the future, the Eugenics Record Office, the American Genetic Association, and the like.

Dr. Morgan Smith, delegate from the Section on Preventive Medicine and Public Health, presented the following:

WHEREAS, The improvement and control of the milk-supply of the country is one of the most important measures of the protection of the public health, and in order that this improvement may be properly directed and the control intelligently exercised, it is necessary that milk standards be established and classes of milk be defined, therefore, be it

Resolved, 1. That the Section on Preventive Medicine and Hygiene of the American Medical Association urges the House of Delegates to approve of the establishment of uniform milk standards and the classification of milk such as are embodied in the report of the Commission on Milk Standards appointed by the New York Milk Committee and published in the *Public Health Reports*, Aug. 22, 1913, and

2. That the Section on Preventive Medicine and Hygiene of the American Medical Association recommends that the House of Delegates urge the adoption of these standards and classification by municipalities, so far as local conditions make that possible. (Referred to the Reference Committee on Hygiene and Public Health.)

Dr. Morgan Smith, delegate from the Section on Preventive Medicine and Public Health, presented the following resolution:

Resolved, That the Council on Medical Education be requested to investigate the courses of instruction now leading to the degree of Doctor of Public Health and similar degrees and to outline minimum requirements for such courses.

Referred to the Reference Committee on Medical Education.

Dr. Morgan Smith, delegate from the Section on Preventive Medicine and Public Health, presented the following resolution:

Resolved, That a committee be appointed to represent the American Medical Association in any conferences that may be held or any action that may be taken looking toward the formulation and enactment of laws and regulations providing for the reporting of cases of disease and disability.

Referred to the Reference Committee on Legislation and Political Action:

Dr. Ray L. Wilbur, delegate from the Section on Pharmacology and Therapeutics, presented the following:

WHEREAS, The Pharmacopeia of the United States of America should be, above all, a book designed to protect the public health and prevent the exploitation of the sick and afflicted for profit; therefore, be it

Resolved, That the members of the Section on Pharmacology and Therapeutics of the American Medical Association request the House of Delegates to urge on the Revision Committee to make official in the Pharmacopeia of the United States "corrosive mercuric chloride pastilles" so that physicians may not be compelled to prescribe this remedy under a proprietary name; be it further

Resolved, That this Section endorse the form and description of corrosive mercuric chlorid pastilles as described in the German Pharmacopeia, namely, of cylindrical shape, twice as long as thick, wrapped individually in paper bearing the name of the medicament "corrosive mercuric chloride pastilles" and the word "poison" in suitable and striking letters; be it further

Resolved, That a copy of this resolution be forwarded by the Secretary of the American Medical Association to the president and to each of the officers of the United States Pharmacopeial Convention and also to the chairman and to each member of the Committee of Revision of the Pharmacopeia of the United States.

On motion, which was duly seconded, the resolutions were referred to the Reference Committee on Legislation and Political Action.

Supplementary Report of the Committee to Consider Mode of Commemoration of the Completion of the Panama Canal

Dr. A. L. Brittin, Illinois, Secretary, presented the following:

Resolved, That the House of Delegates set aside a day during the next Annual Session of the American Medical Association to be designated as "Honor Day" in recognition of the services of the men living or dead whose contributions to sanitary science and preventive medicine have made possible the construction of the Canal, and on that day a general session of the American Medical Association be held to which the public shall be invited.

ALBERT L. BRITTIN, *Secretary*,
M. L. GRAVES,
J. L. WIGGINS,
H. B. M. ELLIS.

On motion, which was duly seconded, the report was referred to the Board of Trustees.

The President announced the following as a special committee on report next year on Sections and Section Work: Dr. Hugh Cabot, Massachusetts; Dr. W. T. Mulligan, New York; Dr. F. C. Warnshuis, Michigan; Dr. Morgan Smith, Arkansas, and Dr. F. W. McRae, Georgia.

Dr. Arthur T. McCormack, Kentucky, moved that the Reference Committee on Amendments to the Constitution and By-Laws be requested to draft an amendment to the By-Laws providing for an initial meeting of the House of Delegates on the Saturday preceding the annual session.

Seconded and carried.

On motion, which was duly seconded, the House of Delegates then adjourned until 2 p. m., Thursday.

Fifth Meeting—Thursday, June 25

The House of Delegates met at 2 p. m. and was called to order by the President.

The Secretary announced a quorum present.

The minutes of the previous meeting were read and approved.

Dr. D. Chester Brown, Connecticut, Chairman, presented a supplementary report from the Committee on Credentials.

The first order of business was the election of officers. The House proceeded to an election, which resulted in the choice of the following:

President-Elect, William L. Rodman, Philadelphia; First Vice-President, D. S. Fairchild, Des Moines, Iowa; Second Vice-President, Wisner R. Townsend, New York; Third Vice-President, Alice Hamilton, Chicago; Fourth Vice-President, William Edgar Darnall, Atlantic City, N. J.; Secretary, Alexander R. Craig, Chicago; Trustees, Philip Marvel, Atlantic City, N. J.; Philip Mills Jones, San Francisco; W. T. Sarles, Sparta, Wis.; Chairman of the Committee on Transportation and Place of Session, J. R. Pennington, Chicago.

The President then nominated and the House confirmed the following: Member of the Judicial Council, Alexander Lambert, New York; Member of the Council on Health and Public Instruction, H. M. Bracken, Minneapolis; Member of Council on Medical Education, Arthur Dean Bevan, Chicago.

The Secretary presented a list of names of nominees for Associate Fellowship endorsed by the officers of the following Sections: Pharmacology and Therapeutics, Pathology and Physiology, Stomatology, Preventive Medicine and Public Health.

Dr. Thomas D. Davis, Pennsylvania, moved that the Secretary be authorized to cast a ballot for the House in each instance in which the applicant is not eligible to regular membership in this Association.

Seconded and carried.

Honorary Fellow Elected

Dr. Hugh Cabot, Massachusetts, Chairman, presented the report of the Reference Committee on Sections and Section Work, as follows:

Your Committee has received the nomination from the Section on Surgery of Alexander Primrose to be an Honorary Fellow. We recommend to the House that Dr. Primrose be made an Honorary Fellow.

Dr. C. E. Cantrell, Texas, moved that the report be adopted, and Dr. Primrose be elected.

Seconded and carried.

Nominations for Honorary Fellowship were also received from the Section on Dermatology and the Section on Nervous and Mental Diseases, too late to be considered at this annual session, and it was moved that they be laid on the table for the next session of the House.

Seconded and carried.

Dr. H. Bert Ellis, California, Chairman, presented the report of the Reference Committee on Medical Education, recommending that the resolution presented by Dr. Morgan Smith, delegate from the Section on Preventive Medicine and Public Health, and referred to this reference committee, be in turn referred by the House to the Council on Health and Public Instruction.

On motion, which was duly seconded, the recommendation of the committee was concurred in and the resolution so referred.

Report of Reference Committee on Hygiene and Public Health

Dr. J. W. Kerr, United States Public Health Service, Chairman, presented a supplementary report from the Reference Committee on Hygiene and Public Health.

Your Committee, which has had referred to it three resolutions emanating from various sections, has to report, with recommendations, as follows:

1. Concerning the resolution introduced by Dr. William A. Pusey, delegate from the Section on Dermatology, inviting attention to the need of provision for adequate care and control of leprosy, and recommending that action be taken looking to the passage by Congress of a law which will accomplish this end, the Committee approves the resolution and recommends its adoption.

2. The preamble and resolution presented by Dr. Morgan Smith, on behalf of the Section on Preventive Medicine and Public Health, in effect invites attention to the importance of the control of milk-supplies in the interest of the public health, requests the House of Delegates to approve of the establishment of uniform milk standards and the classification of milk as embodied in the report of a "Commission on Milk Standards" published in the *Public Health Reports*, Aug. 22, 1913, and recommends that the House of Delegates urge the adoption of these standards and classification by municipalities, so far as local conditions will permit.

The milk standards and classification of milk referred to represent the consensus of opinion of experts eminently qualified to advise in respect to the sanitation of municipal milk-supplies. The Committee believes these standards and classification are reasonable and their adoption by municipalities would be in the interest of greater uniformity and better control of milk-supplies. The resolution as presented is, therefore, recommended for adoption.

3. The resolution presented by Dr. Dunbar Roy, delegate from the Section on Laryngology, Otology and Rhinology, requests that the House of Delegates urge legislation to compel proper labeling of all cleansing preparations of a caustic character and sold by grocers and other merchants. The Committee approves this resolution, and recommends its adoption, with the suggestion that it be brought to the attention of both federal and state legislative bodies by the Council on Health and Public Instruction and by the respective state associations.

Respectfully submitted,

J. W. KERR, *Chairman*,
MORGAN SMITH,
FRANK J. GILBERT,
A. M. HARVEY,
WILLIAM SMITH LALOR.

It was moved that the report be adopted.

Seconded and carried.

Supplementary Report of the Reference Committee on Amendments to the Constitution and By-Laws

Dr. Floyd M. Crandall, New York, presented a supplementary report of the Reference Committee on Amendments to the Constitution and By-Laws which, on motion, duly seconded, was received, and amendment laid over until the next session.

The report is as follows:

At the session of the House of Delegates, held June 24, 1914, the following resolution was introduced and adopted:

Resolved, That the Reference Committee on Amendments to the Constitution and By-Laws be requested to draft an amendment to the By-Laws, providing for an initial meeting of the House of Delegates on the Saturday preceding the Annual Session.

The Committee, therefore, presents the following draft of an amendment to Section 1, Chapter III, of the By-Laws, namely:

"That the word 'day' be stricken out and the word 'Saturday' be substituted, so that the section shall read: 'The House of Delegates shall meet annually, on the Saturday preceding the opening of, and at the same place as, the Annual Assembly of the Association.'"

W. A. JAYNE, *Chairman*,
FLOYD M. CRANDALL,
CHARLES RICHARD,
PERRY BROMBERG.

Dr. Arthur T. McCormack, Kentucky, Chairman, presented a report from the Reference Committee on Miscellaneous Business, recommending that the resolution from the Section on Nervous and Mental Diseases submitted by Dr. R. E. Southard, delegate from the section, at the last meeting of the House, be referred to the Council on Health and Public Instruction.

Dr. G. Lane Taneyhill, Maryland, moved that the recommendation be concurred in.

Seconded and carried.

Report of Reference Committee on Legislation and Political Action

Dr. E. J. Goodwin, Missouri, Chairman, presented a report of the Reference Committee on Legislation and Political Action.

To your Reference Committee on Legislation and Political Action were referred the report of the Council on Health and Public Instruction, three resolutions bearing on the question of expert testimony and one resolution from the Section on Pharmacology and Therapeutics.

The report of the Council on Health and Public Instruction has been very carefully considered. Your Committee is impressed with the vast scope of the labors of the Council in extending knowledge among the people concerning health protection, and with the tremendous influence on the public mind

already gained and rapidly increasing of convincing the people that the altruistic and philanthropic endeavors of this Association for the improvement of health conditions, both individual and public, and for the elevation of the standards of medical practice, are not tainted with selfishness or ulterior motives. It is not necessary that the Reference Committee do more than emphasize certain portions of the numerous activities undertaken by the Council, as there are no recommendations in the report requiring a vote of the House on adoption or rejection.

The report of the Council suggests that its activities for the coming year be directed along three general lines, namely: (1) a thorough investigation of present health conditions; (2) the education of the public; (3) crystallizing public opinion on the necessity and practicability of conserving human life.

Your Committee strongly indorses the Council's efforts to correlate existing national health organizations in this country, as described in the report, and recommends that the Council continue its endeavors in this direction. This work contemplates surveys of the public health activities of the federal government and of other national governments for purposes of comparison; of state public health activities; of municipal health activities, and of voluntary national health organizations. It is apparent that our efforts to direct public opinion in the right channel for the conservation of human health and life would thereby be greatly simplified.

The Council has opened a new branch of investigation during the past year, namely, the Medicolegal Bureau, through which information concerning medicolegal questions in all the states may readily be obtained at a common source. It has already prepared a volume containing all the decisions of the supreme courts of this country on medical practice acts; this will be enormously valuable to the medical profession as well as to the legal profession. This book will be issued during the present year.

Among the subcommittees of the Council your Reference Committee desires to commend in the highest terms the work of the Committee on Public Health Among Women. Its influence with the mothers of the country is of incalculable value in the spread of correct ideas for the conservation of child life.

Your Committee would impress on the delegates the importance of the recommendation in the commendable report of the Committee on Defense of Medical Research, namely, that state journal editors scrutinize manuscripts of articles offered for publication with the view of including a statement that anesthesia was employed when in fact that was the case, in order to prevent the circulation of false impressions or misunderstandings by antivivisectionists.

The work of the Committee on Conservation of Vision, appointed in 1913, demonstrates the need of such a division of the Council's activities. The report gives promise, through the splendid results already achieved, that this committee will be very influential in preventing blindness.

The Committee on Revision of the Owen Bill has not been inactive, but could make no progress on account of the many questions before Congress that overshadowed this and other less acute conditions. Your Committee recommends that the House of Delegates reaffirm its endorsement of the principles governing the movement to create a national Department of Health, and commends the Honorable Robert L. Owen for his assiduous championship of such a department.

The Committee on Uniform Regulation of Membership is performing a service in promoting harmonious and uniform methods of organization work that could not otherwise be accomplished, and therefore your Committee recommends that it be continued.

The Committee on Cancer is another recently appointed subcommittee (November, 1913) which has accomplished such excellent results as to justify its creation. While the committee limited its work this year to the issuance of popular articles on cancer, it succeeded in distributing six pamphlets that have been eagerly sought by an increasing number of persons, lay and medical. Your Reference Committee urges all members and Fellows to accord the Committee on Cancer the support and cooperation it asks; such support is essential in this particular field of medical endeavor.

The spontaneous response to the overtures of the Committee to Confer with the National Educational Association to gain the cooperation of the latter body in the cause of public health is a most gratifying and convincing evidence of the far-reaching influence of the work of the Council on Health and Public Instruction; for without the splendid achievements of the Council in the past three years it is certain that the subcommittee could not have presented such weighty arguments favoring the cooperation of these two bodies. Instancing only one feature of this important report, we remind you of the statement by this Committee that the health of country schoolchildren is far below the standard of city schoolchildren, as shown by surveys, which so shocked and surprised the members of the National Education Association as to arouse a general desire on their part to improve the conditions of rural school life.

The report of the Committee on Expert Testimony is, we believe, conservative and based on a sound understanding of well-known conditions. The solution of this vexed problem cannot be forced; it must come gradually and with the cooperation of the American Bar Association and the various state bar associations. If the recommendations of the Committee on Expert Testimony are adopted in court procedures, legal contests will be stripped of much of the stigma that now attaches to expert testimony, and especially to medical expert testimony, and lead to further improvement. We recommend that the Council's purpose to issue a draft of a bill for the consideration of state legislatures be endorsed.

In concluding this report, your Reference Committee expresses the conviction that the activities of the Council on Health and Public Instruction are vital to the welfare of the American Medical Association. The work of the Council will either promote a friendly spirit of cooperation on the part of the people or arouse their opposition. Thus far, nothing but a commendable and very gratifying attitude of cordiality on the part of the people has been exhibited toward the Council, and this is due, we believe, to the broad, liberal and judicious manner adopted by the Council in approaching the problems that confront it. No radical departure from this course should be permitted.

In order that the work of the Council on Health and Public Instruction and of its various subcommittees may meet the unanimous support of the constitutent state associations, your Reference Committee reaffirms the recommendation of the Reference Committee of 1913, namely:

"That the Council in developing its activities . . . shall work through the constitutent state associations and their committees rather than by the creation of new or special committees; and that all committees and persons representing any department of the American Medical Association or representing any of its activities within the borders of any constituent state association shall be appointed by the executive officers of the state associations; and such committees shall be under the jurisdiction and control of the state association and responsible to the Council on Health and Public Instruction through the state association.

"That no committee shall be appointed by the sections or by any subcommittee with duties extending into the territory of any constituent state association. That all such committees shall be appointed by the constituent state association and be under the jurisdiction and control of the state association."

Three resolutions on the question of medical expert testimony were referred to your Committee, namely, one by Dr. J. J. McGovern, delegate from Wisconsin; one from the Section on Ophthalmology, and one containing a copy of a suggested bill on medical expert testimony in Pennsylvania.

Your Committee has given these resolutions very careful consideration. The Committee thoroughly appreciates the present unsatisfactory conditions surrounding expert testimony. The simultaneous appearance of so many suggestions from Fellows and branches of the Association emphasizes the great necessity for clarifying this question at as early a time as possible and is an evidence that the members and Fellows have an abiding faith in the efficiency of the organization to solve questions that affect the practice of medicine in all its phases. Your Committee believes, however, that the Council on Health and Public Instruction is in position to bring about a solution to this question more speedily and more satisfactorily than can be done by the duplication of committees working along similar lines. Your Committee recommends that the resolutions be referred to the Council on Health and Public Instruction.

The resolution introduced by Dr. Morgan Smith, delegate from the Section on Preventive Medicine and Public Health, is not sufficiently lucid to enable this Committee to arrive at a conclusion of its purpose and intent. It is recommended that the resolution be referred to the Council on Health and Public Instruction for their consideration.

The resolution introduced by Dr. Ray L. Wilbur, delegate from the Section on Pharmocology and Therapeutics, requesting the including in the Pharmacopeia of corrosive mercuric chloride pastilles, is approved.

E. J. GOODWIN, *Chairman,*
EDWIN WALKER,
E. J. MCKNIGHT,
HUGH H. YOUNG,
HOLMAN TAYLOR,

On separate motions, which were duly seconded, the report of the Reference Committee was adopted.

Dr. Dwight H. Murray, New York, reported for the Committee on Scientific Exhibits as follows:

Report of Committee on Awards on Scientific Exhibit

The Committee on Awards of the Scientific Exhibit beg leave to report as follows:

That the first prize, the gold medal for the best Scientific Exhibit, be awarded to Miss Maude Slye of the Otho S. A. Sprague Memorial Institute of Chicago, for her exhibit of charts, diagrams, specimens and tables on the transmission of hereditary cancer and other diseases in mice.

The committee wishes further to express its admiration of Miss Slye's work in this field and its appreciation of the great personal sacrifice she has made and for her courtesy in presenting the work before the Association.

The committee awards the following certificates of merit for the following exhibits:

1. Dr. Robert A. Lambert, New York, on artificial cultivation of tissues.

2. Drs. A. D. Hirschfelder, M. C. Winternitz and B. S. Kline, Maryland, on experimental pneumonia.

6. Dr. H. F. Smyth, Pennsylvania, on action of toxins on artificial cultivation of tissues.

7. G. W. Cosmak and J. R. Losee, New York, on toxemias of pregnancy, fetal anomalies, etc.

10. Dr. J. S. Horsley, Virginia, on blood-vessel surgery.

13. Drs. E. E. Tyzzer and William Duane, Massachusetts, on therapeutic studies of radium, radio-active products, etc.

16. Dr. W. M. Price, Ohio, on research exhibit of the National Dental Association.

19. Dr. E. Goetsch, Massachusetts, on influence of pituitary extract feeding on genital development.

21. Dr. E. C. Streeter, Massachusetts, on historical exhibit dealing with the life and work of Vesalius.

24. Dr. M. T. Cook, New Jersey, on plant pathology.

25. Dr. R. D. Carman, Minnesota, on roentgenograms of the alimentary canal.

Dr. Stiles, New York, an exhibit of anatomic dissections, made by freshmen of the Medical Department of Syracuse University.

Honorary mention:

3. Drs. J. W. Draper and B. F. Farrel, New York, on types of infection in connection with hydronephrosis.

4. Research of the R. M. Thompson Pellagra Commission.

9. Dr. D. N. Eisendrath, Chicago, collargol injections of the kidneys of dogs.

11. Exhibition of photographs and photomicrographs from the Mayo Clinic.

25. Dr. J. T. Case, Michigan, on lantern-slides illustrating Roentgen-ray studies. Dr. Lewis Gregory Cole, New York, on roentgenoscopy of gastro-intestinal lesions.

The Committee wishes to commend the general excellence of the exhibits and thank the exhibitors for their courtesy in presenting their valuable exhibits before the Association.

In studying the exhibits, the committee has been impressed by the opportunity afforded by this display of bringing annually to the attention of the Association the results of research in various laboratories in the country, and would recommend that an effort be made to increase the number of the demonstrations of actual investigation work rather than the collection of specimens. To this end, we recommend that a larger appropriation be placed at the disposal of the Committee on Scientific Exhibit and that an annual honorarium be allowed the director of the Scientific Exhibit.

Finally, the committee wishes to express its appreciation for the magnificent work done by Dr. Frank B. Wynn, chairman of the Committee on Scientific Exhibit.

RICHARD M. PEARCE, *Chairman,*
DWIGHT H. MURRAY,
WILLIAM J. MEANS.

On motion, the awards recommended by the committee were approved and the report referred to the Board of Trustees.

Report of Committee on Transportation and Place of Session

The report of the Committee on Transportation and Place of Session was then presented, as follows:

Your Committee on Transportation and Place of Session has received invitations to hold the next annual session of the American Medical Association in the following cities, which your Committee reports alphabetically: Atlanta, Baltimore, Chattanooga, Chicago, Columbus, Denver, St. Louis, San Francisco and Seattle.

The Committee has given careful consideration to each of these, and reports that for the best interests of the Association and the profession at large, the next annual session be held in Chicago.

J. RAWSON PENNINGTON, *Chairman,*
THOMAS D. COLEMAN,
B. FRANKLIN STAHL,
W. T. SARLES,
DONALD CAMPBELL.

Dr. A. M. Harvey, Illinois, moved the adoption of the report. Seconded.

Dr. J. W. Andrews, Minnesota, moved to amend the report by striking out "Chicago" and inserting the word "San Francisco." Seconded.

After discussion by Drs. V. G. Vecki, California; H. V. Wurdemann, Washington; A. A. O'Neill, Illinois; Hugh Cabot, Massachusetts; M. A. Clark, Georgia; D. Chester Brown, Connecticut; J. W. Andrews, Minnesota; Perry Bromberg, Tennessee; A. M. Harvey, Illinois, and George Hare, California, Dr. C. E. Cantrell, Texas, moved the previous question.

Seconded and carried.

On the question being put, there were 33 votes in favor of the amendment, and 28 opposed.

It was moved that the report be adopted as amended.

Seconded and carried.

Dr. Perry Bromberg, Tennessee, moved that the fixing of the date of meeting be delegated to the Board of Trustees with power.

Seconded and carried.

On motion, which was duly seconded, the House of Delegates then adjourned *sine die.*

Members of House of Delegates in Attendance

[The figures indicate the number of delegates to which the state is entitled.]

ALABAMA—3
E. D. Bondurant.....Mobile
H. T. Inge.....Mobile
W. H. Sanders.....Montgomery

ARKANSAS—2
William V. Laws.....Hot Springs

CALIFORNIA—3
George Hare.....Fresno
V. G. Vecki.....San Francisco
H. Bert Ellis.....Los Angeles

COLORADO—2
W. A. Jayne.....Denver
L. H. McKinnie..Colorado Springs

CONNECTICUT—2
D. Chester Brown.....Danbury
E. J. McKnight.....Hartford

DELAWARE—1
Henry J. Stubbs.....Wilmington

DISTRICT OF COLUMBIA—1
G. Wythe Cook.....Washington

FLORIDA—1
John MacDiarmid.....DeLand

GEORGIA—3
M. A. Clark.....Macon
E. C. Davis.....Atlanta
W. C. Lyle.....Augusta

ILLINOIS—9
A. M. Harvey.....Chicago
A. Augustus O'Neill.....Chicago
J. A. Koch.....Quincy
G. L. Armstrong.....Taylorville
J. W. Hamilton.....Mt. Vernon
F. C. Gale.....Pekin
W. L. Noble.....Chicago
C. P. Caldwell.....Chicago
Henry F. Lewis.....Chicago

INDIANA—4
F. B. Wynn.....Indianapolis
J. M. Dinnen.....Ft. Wayne
C. Rilus Eastman.....Indianapolis
Edwin Walker.....Evansville

IOWA—3
J. C. Rockafellow.....Des Moines
L. W. Littig.....Davenport
M. N. Voldeng.....Cherokee

KANSAS—2
Joseph E. Sawtell.....Kansas City
E. S. Pettijohn.....Topeka

KENTUCKY—4
J. W. Kinkaid.....Catlettsburg
A. T. McCormack...Bowling Green
Milton Board.....Louisville
A. H. Barkley.....Lexington

LOUISIANA—2
Louis Abramson.....Shreveport

MAINE—1
Frank Y. Gilbert.....Portland

MARYLAND—2
Hugh H. Young.....Baltimore
G. Lane Taneyhill.....Baltimore

MASSACHUSETTS—5
Hugh Cabot.....Boston
J. B. Blake.....Boston
H. G. Stetson.....Greenfield
L. F. Woodward.....Worcester

MICHIGAN—4
H. E. Randall.....Flint
L. J. Hirschman.....Detroit
E. T. Abrams.....Dollar Bay
F. C. Warnshuis.....Grand Rapids

MINNESOTA—2
W. A. Coventry.....Duluth
J. W. Andrews.....Mankato

MISSOURI—5
Robert M. Funkhouser....St. Louis
E. J. Goodwin.....St. Louis
E. H. Miller.....Liberty
Franklyn E. Murphy...Kansas City
H. L. Reid.....Charleston

MONTANA—1
LeRoy Southmayd.....Great Falls

NEBRASKA—2
A. R. Mitchell.....Lincoln
A. I. MacKinnon.....Lincoln

NEW HAMPSHIRE—1
D. E. Sullivan.....Concord

NEW JERSEY—3
W. S. Lalor.....Trenton
Linn Emerson.....Orange
Edward Guion.....Atlantic City

NEW MEXICO—1
S. L. Burton.....Albuquerque

NEW YORK—11
Henry L. Elsner.....Syracuse
Floyd M. Crandall.....New York
John C. Polak.....Brooklyn
S. W. S. Toms.....Nyack
D. H. Murray.....Syracuse
Wendell C. Phillips.....New York
James W. Fleming.....Brooklyn
J. C. MacEvitt.....Brooklyn
Charles H. Richardson..New York
Edgar A. Vander Veer.....Albany
Wesley T. Mulligan.....Rochester

NORTH CAROLINA—2
H. A. Royster.....Raleigh

NORTH DAKOTA—1
C. S. Crane.....Grand Forks

OHIO—6
B. R. McClellan.....Xenia
W. J. Means.....Columbus
C. D. Selby.....Toledo
J. C. M. Floyd.....Steubenville

OKLAHOMA—2
J. H. White.....Muskogee
W. A. Tolleson.....Enfanta

OREGON—1
Walter T. Williamson.....Portland

PENNSYLVANIA—9
Thomas D. Davis.....Pittsburgh
William T. Hamilton..Philadelphia
John B. McAlister.....Harrisburg
W. Rowland Davies.....Scranton
Americus R. Allen.....Carlisle
J. Montgomery Baldy..Philadelphia
Herbert B. Gibby....Wilkes-Barre
Theo. B. Appel.....Lancaster
Adolph Koenig.....Pittsburgh

RHODE ISLAND—1
John W. Keefe.....Providence

SOUTH CAROLINA—1
Edgar A. Hines.....Seneca

SOUTH DAKOTA—1
E. D. Putnam.....Sioux Falls

TENNESSEE—2
Perry Bromberg.....Nashville
E. C. Ellett.....Memphis

TEXAS—5
Holman Taylor.....Ft. Worth
C. A. Smith.....Texarkana
Frank Pascal.....San Antonio
C. E. Cantrell.....Greenville
Marvin L. Graves.....Galveston

VERMONT—1
C. H. Beecher.....Burlington

VIRGINIA—3
J. Shelton Horsley.....Richmond
W. E. Anderson.....Farmville
Kirkland Ruffin.....Norfolk

WASHINGTON—2
H. V. Wurdemann.....Seattle

WEST VIRGINIA—1
John L. Dickey.....Wheeling

WISCONSIN—3
J. J. McGovern.....Milwaukee
Rock Sleyster.....Waupun
C. A. Harper.....Madison

WYOMING—1
M. A. Newell.....Sheridan

Delegates from the Sections

PRACTICE OF MEDICINE
Joseph H. Pratt.....Boston

SURGERY
Fred Lund.....Boston

OBSTETRICS, GYNECOLOGY AND ABDOMINAL SURGERY
Thomas S. Cullen.....Baltimore

OPHTHALMOLOGY
Melville Black.....Denver

LARYNGOLOGY, OTOLOGY AND RHINOLOGY
Dunbar Roy.....Atlanta, Ga.

DISEASES OF CHILDREN
J. P. Sedgwick.....Minneapolis

PHARMACOLOGY AND THERAPEUTICS
Ray L. Wilbur..San Francisco, Cal.

PATHOLOGY AND PHYSIOLOGY
Richard M. Pearce....Philadelphia

STOMATOLOGY
G. V. I. Brown.....Milwaukee

NERVOUS AND MENTAL DISEASES
E. E. Southard...Cambridge, Mass

DERMATOLOGY
William A. Pusey.....Chicago

PREVENTIVE MEDICINE AND PUBLIC HEALTH
Morgan Smith.....Little Rock

GENITO-URINARY DISEASES
William M. Spitzer.....Denver

HOSPITALS
Bryan Hollings.....Boston

ORTHOPEDIC SURGERY
John Ridlon.....Chicago

Delegates from Government Services

Charles Richard.....United States Army
Robert M. Kennedy.....United States Navy
John W. Kerr.....U. S. Public Health Service

THE SCIENTIFIC ASSEMBLY

THE OPENING GENERAL MEETING

Tuesday Morning, June 23

The opening meeting of the Association was held at the Apollo Theater, and was called to order at 10:30 a. m. by the President, Dr. John A. Witherspoon, Nashville, Tenn.

On the platform were Ex-Presidents, Vice-Presidents, the Secretary, the Editor and General Manager, members of the Judicial Council, and members of the Board of Trustees.

Rev. Henry Merle Mellen, Atlantic City, delivered the invocation.

Invocation

Gracious God, our Heavenly Father, we bring hearty thanks to these Thy sons and daughters who are to begin this convention which shall mean so much to this city, to this state, and to this great land of ours. We thank Thee for the work in which they are engaged. We thank Thee for the progress that has been made through their instrumentality. We thank Thee for the far-reaching influence of their labors. We thank Thee that here during these days there shall be represented the finest and truest and noblest influences in the land. It is a glorious thing to go about doing good. The healing of the nation is a divine idea, and grant that these Thy sons and daughters as they go about this great and glorious business, may find those true and abiding rewards in the gratitude of the men and women whom they serve. Grant that all these deliberations during these coming days may be filled with great wisdom, with great charity, with great kindness and with great efficiency, and may there go forth from these deliberations a mighty impetus for greater service, for greater influence, and for truer immortality. Bless all the officers, and bless him who presides. Bless those who make records of the proceedings, and bless those who have the business of the Association in hand, and may this meeting of Thy sons and daughters be accompanied by Thy grace and Thy favor. We ask these things for Thy name's sake. Amen.

Addresses of Welcome

President Witherspoon introduced the Hon. William Riddle, Mayor of Atlantic City, who delivered the following address:

ADDRESS OF WELCOME BY MAYOR RIDDLE

Mr. President, Ladies and Gentlemen: It is more of a pleasure than a duty to speak to you for all of the people of Atlantic City, and to say that Atlantic City owes her great success and her wonderful progress to the physicians of this country. Many years ago there was a circular sent out by the old Camden and Atlantic Railroad, which is the railroad the Pennsylvania now operates, describing what a wonderful climate this city had. Physicians generally took the matter up and advised their patients to come here to convalesce, and from that day Atlantic City began to grow and thrive and has become the greatest seaside resort in America. In numbers of people who frequent it, it is perhaps the largest seaside resort, excepting possibly Blackpool in England, which there is in the world. I want to say to you physicians that Atlantic City is deeply grateful to you. There is no class of men, no profession, no men in business to whom the people of Atlantic City are more grateful than they are to you.

Speaking about our climate, about a month ago I had to undergo a surgical operation for the removal of my appendix, and after convalescing I went to the country, Montgomery County, Pa. I went into a hospital, and they told me I was suffering from cardiac asthma induced perhaps by the ether. I did not get rid of it in the country, but two days after I returned to my home here the asthma had entirely disappeared, and I believe that Atlantic City to-day is a splendid place for asthma. (Laughter and applause.)

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I received a letter from the proprietor of the Hotel Knickerbocker, New York, from Bad-Nauheim, who writes me that the city has erected a runway a mile long and about 50 feet in height. It is filled with branches of trees and they sprinkle salt water over the branches each day and tell the patient to wander along this runway and inhale the salt water. (Laughter.)

They advise American patients when they go home to come to Atlantic City. I can say to you as one who is convalescing that Atlantic City is rich in its rolling-chairs so that you can all enjoy the sea breezes. If any of you are sick, I would recommend that you stay here for some time.

Furthermore, I will say to you that Atlantic City and its government stand ready to do anything in their power to make your visit a pleasant one, and we hope that you will honor us by returning to this city very soon. We have many advantages which they do not have in other cities. For instance, our hotels are so concentrated that the delegates find it easy to get to the places of meeting. There is not the difficulty in bringing the delegates together which you will find in some cities. There are other attractions. You have come here during the season for bathing. You can have an ocean bath at any time. We have a splendid country club, which I hope you will visit. Only a few miles from here you will find that the fishing is good.

Again, I desire to thank you for your visit to Atlantic City and to say that we are grateful to you for making it such a great resort. (Applause.)

ADDRESS OF WELCOME BY THE PRESIDENT OF THE MEDICAL SOCIETY OF NEW JERSEY

Dr. Enoch Hollingshead was introduced and said:

Mr. President, Members of the American Medical Association, Ladies and Gentlemen: It gives me pleasure to greet you in the name of the Medical Society of New Jersey, the oldest State Medical Society in America. We greet you as Allah greets the rising sun, with reverence. We greet you as friends. We greet you as brothers on their own threshold. We greet you in this city with breezes laden with ozone from the ocean. We greet you as creators of medical thought, believing that you are of the best in the country, if not in the world. We greet you in bringing to us America's best thought for the benefit of all mankind, and especially for our own country, believing that no nation can be successful that does not make its medical object high. We welcome you from valley, hill and plain, and from every section of our vast domain, believing that the experiences which you will relate here will be of vast and incalculable benefit to mankind. Again, I greet you. (Applause.)

ADDRESS BY THE ATTORNEY-GENERAL OF NEW JERSEY

After announcements by the Chairman of the Committee of Arrangements, Dr. William Edgar Darnall, Atlantic City, the Hon. John Westcott, attorney-general of New Jersey, was introduced and said:

Mr. President, Members of the American Medical Association, Ladies and Gentlemen: This whole proceeding at the present time suggests a physician direct to the point, without fuss and without feathers, and the incongruity of the situation is that a lawyer should be among you. A lawyer among doctors is perhaps not in the right place (laughter), yet I can readily see that he is in the right place because, being a necessary evil, and the function of the physician being that to exclude necessary evils, the best way to get rid of the lawyer is to put him among physicians. (Laughter.)

You have been welcomed by the mayor to the queen of all summer resorts. You have been welcomed by the president of the medical society of the great state of New Jersey. Through the governor of New Jersey, a man whose mind is sensitive to modern progress, I am commissioned in behalf of the state to welcome you. The great difficulty is for a lawyer to know the appropriate thing to say. I once heard of a young man who was much concerned about his destiny and his duty as a human being. After looking over the field carefully, he concluded that he could do the most good by saving human souls, so he became a preacher. Very soon he was disabused of his misconception and he found that men were more concerned about their bodies than they were about their souls. He straightway became a physician. He soon perceived the error of his second choice and found that, after all, men were more concerned about their pocketbooks than either their bodies or souls, so he became a lawyer. (Laughter.) I believe that men are destined to care less for their pocketbooks than they care for their souls and bodies. I believe that the human family is coming to realize that the soul and body are so closely identified that you cannot have a great soul without a great body. (Applause.)

The medical profession from the point of view of a stupid lawyer seems up to this time to have been a profession of empiricism, a profession of individual action, and almost necessarily so because the physician deals with a specific case all the time and he never knows its parallel exactly; and I will remark in passing that it is said of the lawyer that he is a machine and the only machine on earth that when once set going never knows when to stop. (Laughter.)

I was about to observe that the medical profession has developed a peculiar type of courage. The martyr goes to his doom; a soldier now and then goes to his death under circumstances of tremendous dramatic significance—excitement. The doctor, on the other hand, not once in a century, not when a war occurs, but hourly, every day of his life, not under circumstances of excitement, but under conditions of mental calm, under the force of poise, confronts not only danger but actually walks into the jaws of death, and he does it silently, unknown, unseen and unsung. Hence the physician by the necessity of his training and calling has developed a peculiar type of courage, and I do not hesitate to say, the highest species of courage known to the human animal. The force of that remark is to be found in what I am now about to say. The medical profession up to now has been a profession of separateness, if I may use the expression. The physician has had to go it alone. The characteristic of the age is cooperation. Cooperation is the expression of economy. The physician finally has come to appreciate the power of coordination and cooperation; hence your presence here to-day. I trust, and I have no doubt it will come to pass, that not only every state will have its medical organization, but also every county in every state; and every county organization should be closely affiliated with the state organization and every state organization with the national organization; then with 250,000 of the bravest men in the land thus coordinated, thus cooperating, much will be done for the redemption of society or its improvement. (Applause.) Such a cooperative scheme will result in the oneness of purpose that is simply resistless; therefore, such an organization can effect legislation in every state in the Union, and in the national legislature looking to the improvement of the people. When I say improvement of the people, what do I mean? I mean morals, religion, as well as physical conditions, because without complete physical conditions you cannot have a complete morality, nor can you have a sound theology, nor can you have an inspiring religion. The physician up to now, as I understand it, while he has labored at the foundation of society, has done so piecemeal. You have worked at each block of stone in the foundation, but not at the foundation by a scheme and a general purpose; consequently you have scattered far; now you are concentrating your energy. Therefore, I say, the physician is a philosopher; he is an economist; he is a politician, and I go so far as to say that the soundness of our institutions and their perpetuity rest more in the hands of the medical profession than in the hands of any other class of men. In the hands of the medical profession rests the future of this country, because in the hands of your profession rest the physical lives of the country, because in the soundness of the physical life of the country rests its morality, its religion and its patriotism. (Applause.)

One more suggestion or concluding observation is this: I have observed that the human animal is a susceptible creature in every direction. I am not going to talk about the philosophy of love. The average man or woman in picking up a newspaper and reading an advertisement in relation to his health will by the constructive processes of his imagination immediately appropriate as a part of his own physical life the delineation of every symptom that he finds stated in that advertisement as belonging to him, and the disease which that advertisement portrays in such awful colors as his disease. Such is the plasticity of the human mind. At the end of that advertisement there is a proposition to cure that disease, and it is immediately believed and straightway the reader of that advertisement hies himself to a drug-store and buys his freedom from disease. What does he buy? He buys a compound. What is that compound? God only knows. It is called euphoniously a proprietary concoction. This concoction is not created with scientific knowledge, but with a correct comprehension of

human weakness, impelled by the desire in the creator of the compound to do what a lawyer does—take everybody's money in sight. (Laughter.) Statistics on the subject are obtainable, I am told. I have seen some; but how reliable they are I do not know. I assume from the sources that these statistics are approximately correct. While not wearying you with statistics, you will agree with me in the assertion that the American people are every moment of their lives, every hour in the day, every day in the week, every week in the month, and every month in the year, consuming these unknowable compounds, when they are in the solid form, by the ton; when they are in the liquid form, by the hogshead—millions of gallons of this liquid stuff are consumed by the American people annually. In other words, the very foundations of society have poured into them every day destruction through proprietary medicines. What are you doctors going to do about it? You are organized. Your organization will become more and more perfect every day if you have the courage of which I have spoken, and I know you have, to keep on agitating this question for the benefit of the people. See that the manufacturers of these poisons are hedged about by such legislative reforms as hedge you about and compel you to know what you are doing. (Applause.)

So, I conclude, Mr. President, with the laudation not only that your profession carries in the hollow of its hand the destinies of this country, but also that your most conspicuous duty at the present time is to see that the American people are saved from a continuous process of poisoning through liberated ignorance. (Loud and prolonged applause.)

President Witherspoon said:

As your retiring president, I want to respond briefly to these addresses of welcome and to say to the people of Atlantic City how much we appreciate them. I want especially to express our gratitude and thanks to the last speaker for his remarks. He has not only spoken of our organization and of the unit from the county to the state society and from the state society to the national society, but also he has absolutely followed the trail that we have fought along the road through the wilderness of ignorance until it would seem that he had been employed as counsel of the American Medical Association. (Laughter.)

I endorse the remarks of the attorney-general and have adopted them long since as the motto in the great work of the American Medical Association. (Applause.)

Presentation of Gold Medal to Surgeon-General Gorgas

Dr. Witherspoon then said that one of the acts of his administration was to appoint a special committee, of which Dr. Charles A. L. Reed was made chairman, and he asked Dr. Reed to make a report for that committee.

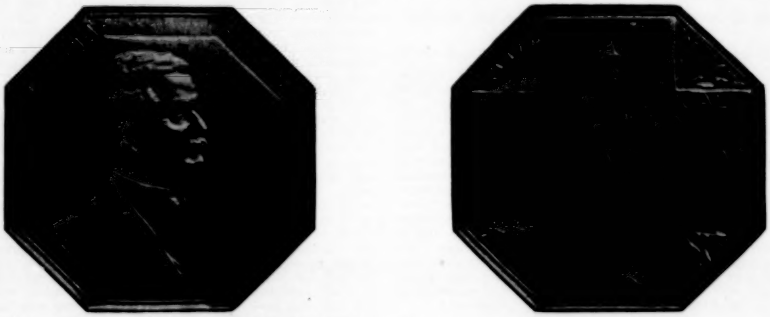
Dr. Reed said:

Mr. President: It is my privilege and happiness to present to you an illustrious member of the medical profession to be the recipient of a gold medal of appreciation now to be conferred by the American Medical Association. Citizen of the republic, graduate in arts and medicine, doctor of science from renowned institutions at home and over seas, army surgeon designated and promoted by special act of Congress to eradicate yellow fever from Havana, member of the Isthmian Canal Commission, chief sanitary officer of the Isthmian Canal Zone, international consultant on great sanitary problems, Fellow and former President of the American Medical Association, honorary and associate fellow of numerous foreign scientific associations, now Surgeon-General of the United States Army, illustrious scientist, executive, writer and scholar, William Crawford Gorgas, Sanitarian, whose genius made possible the construction of the Isthmian Canal. (Applause.)

President Witherspoon continued:

General Gorgas, one of the acts of my administration, of which I am very proud, was the appointment of this special committee for the purpose of showing to the world our appreciation of ability, our appreciation of greatness, our appreciation of that wonderful genius which has made it possible, sir, for you not only to demonstrate to the world that it was possible to build the Panama Canal, but also to go further and show, as you have done, that 500,000 lives which have been lost in our country by preventable diseases can be and will be prevented finally with you at the head of the Army of our country. We hope you will always be at the head of the sanitary protection of our people.

As retiring president of the American Medical Association, it gives me great pleasure to turn over and to present to you, General Gorgas, a gold medal in commemoration of your wonderful ability and your wonderful work that has connected nations and has taught the world that the American Medical Association contains a man who dared to do what was right for the salvation of mankind. (Loud and prolonged applause.)



Medal presented to Surgeon-General Gorgas by the American Medical Association.

General Gorgas, in accepting the gold medal, said:

I thank you, Mr. President, and Fellows of the American Medical Association. I appreciate, of course, the great honor of this occasion, but I would like to have you think that this honor is to be shared by three or four hundred young Americans who have labored in this sanitary work on the Canal Zone, and I receive this medal in part as their chief and as their representative. Again, I thank you. (Loud applause.)

President Witherspoon then said:

The final act of my administration is to introduce to you the man of your choice to preside over your deliberations next year.

I want to say in retiring that my labors have been pleasant; they have been to me a great inspiration, and one of the greatest pleasures of that administration was to follow in the footsteps of such a man as the great Jacobi, and to be followed by such a man as the great Dr. Vaughan. (Applause.)

Dr. Victor C. Vaughan, Ann Arbor, Mich., then delivered his address as President of the American Medical Association, entitled "The Service of Medicine to Civilization," which was published in THE JOURNAL, June 27, 1914, p. 2004.

Minutes of The Sections

SECTION ON PRACTICE OF MEDICINE

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order by the chairman, Dr. Charles Lyman Greene, St. Paul, Minn.

Dr. H. B. Hiatt, High Point, N. C., and Dr. William Allan, Charlotte, N. C., presented a paper entitled "Will Sprue Become Endemic in the United States? Notes on Cases Invalidated from the Tropics." Discussed by Drs. Roger S. Morris, Clifton Springs, N. Y., and H. B. Hiatt, High Point, N. C.

Dr. Tom A. Williams, Washington, D. C., read a paper on "The Syndrome of Adrenal Insufficiency." Discussed by Drs. Frank R. Starky, Philadelphia; Walter L. Bierring, Des Moines, Iowa, and Tom A. Williams, Washington, D. C.

Dr. George Douglas Head, Minneapolis, read a paper on "Neurasthenia and Tuberculosis (Concealed)." Discussed by Drs. Nathan Rosewater, Cleveland; F. M. Pottenger, Monrovia, Cal.; Charles Stover, Amsterdam, N. Y.; Eliza M. Mosher, Brooklyn, N. Y.; A. J. Caffrey, Milwaukee; John Ritter, Chicago; Tom A. Williams, Washington, D. C.; Walter B. Swift, Boston; Albert Robin, Wilmington, Del.; H. S. Plummer, Rochester, Minn.; J. P. Murray, Charlotte, N. C.; Robert W. Willson, Philadelphia, and George Douglas Head, Minneapolis.

Dr. Arthur F. Chace and Dr. M. S. Fine, New York, presented a paper on "The Use of Atophan and Radium Emanation in the Treatment of Gout and the Arthritides." Discussed by Drs. Charles G. Stockton, Buffalo, N. Y.; S. Solis Cohen, Philadelphia, and Arthur F. Chace, New York.

Dr. Louis G. Heyn, Cincinnati, O., read a paper on "Satisfactory Results from Intrarectal Administration of Sodium Salicylate in Acute Rheumatic Fever." Discussed by Drs. E. W. Mitchell, Cincinnati, O.; Joseph L. Miller, Chicago; J. N. Upshur, Richmond, Va.; J. M. Rector, Columbus, O.; James C. Tyson, Philadelphia; Nathan Rosewater, Cleveland, O.; W. W. Tompkins, Charleston, W. Va. and Louis G. Heyn, Cincinnati, O.

WEDNESDAY, JUNE 24—MORNING

The Chairman appointed a nominating committee to report at a subsequent meeting, consisting of Drs. Joseph L. Miller, Chicago; W. S. Thayer, Baltimore, and Alexander Lambert, New York.

A joint meeting was held with the Section on Pathology and Physiology.

The following papers were read as a Symposium on Nutrition:

Prof. L. B. Mendel, New Haven, Conn.: "The Specificity of the Nutrients."

Prof. Otto Folin, Boston: "The Intermediary Metabolism."

Prof. Graham Lusk, New York: "The Specific Dynamic Action of Food."

Dr. Eugene F. Du Bois, New York: "The Total Energy Requirements in Disease as Determined by Calorimetric Observations."

These four papers were discussed by Drs. Victor C. Vaughan, Ann Arbor, Mich.; S. J. Meltzer, New York; F. M. Pottenger, Monrovia, Cal.; E. P. Joslin, Boston; A. D. Eustis, New Orleans; George Douglas Head, Minneapolis; A. J. Carlson, Chicago; L. B. Mendel, New Haven, Conn.; Otto Folin, Boston; Graham Lusk, New York, and Eugene F. Du Bois, New York.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. Robert N. Willson, Philadelphia, read a paper on "The Heart in the Pneumonias." Discussed by Drs. James M. Anders, Philadelphia; W. S. Thayer, Baltimore, and Robert N. Willson, Philadelphia.

Drs. C. Frothingham and W. G. Smillie, Boston, presented a paper on "Effect of Low and High Nitrogen Diet on Renal Function Tests in Chronic Nephritis." Discussed by Drs. L. G. Rowntree, Baltimore; De Lancey Rochester, Buffalo; L. F. Bishop, New York; Jonas, Philadelphia; Walter L. Bierring, Des Moines, Iowa, and C. Frothingham, Boston.

Drs. Harlow Brooks and John Carrol, New York, presented a paper on "The Treatment of Heart Involvement in Syphilis."

Dr. Richard C. Cabot, Boston, read a paper on "The Four Common Types of Heart Disease."

Dr. Alfred Stengel, Philadelphia, read a paper on "Cardiovascular and Renal Responsibility in the Disturbances of Cardiorenal Disease."

These three papers were discussed by Drs. Emanuel Libman, New York; S. Solis Cohen, Philadelphia; Charles Williamson, Chicago; H. S. Plummer, Rochester, Minn.; L. F. Bishop, New York; Robert N. Willson, Philadelphia; Graham E. Henson, Jacksonville, Fla.; Richard C. Cabot, Boston; Harlow Brooks, New York, and Alfred Stengel, Philadelphia.

Drs. L. G. Rowntree, Allen Chesney and E. K. Marshall, Baltimore, presented a paper on "Studies in Liver Function." Discussed by Dr. William S. Thayer, Baltimore.

THURSDAY, JUNE 25—MORNING

The following officers were elected: Chairman, Dr. Thomas MacCrea, Philadelphia; Vice-Chairman, Dr. John L. Dawson; Charleston, S. C.; Secretary, Dr. Roger S. Morris, Clifton Springs, N. Y.; Delegate, Dr. Richard C. Cabot, Boston, and Alternate, Dr. E. E. Irons, Chicago.

Dr. Elliott P. Joslin, Boston, read a paper on "End Results in Gastric and Duodenal Ulcer."

Dr. Frank Smithies, Chicago, read a paper on "Gastric Cancer in the Young: A Study of Fourteen Cases in Patients Under the Age of Thirty-One."

These two papers were discussed by Drs. J. N. Hall, Denver; F. B. Lund, Boston; Frank Billings, Chicago; J. A. Lichty, Pittsburgh; Alexander Lambert, New York; F. A. Speik, Los Angeles; Allen A. Jones, Buffalo, N. Y.; J. R. Verbrycke, Washington, D. C.; Anthony Bassler, New York; George Douglas Head, Minneapolis; M. H. Fussell, Philadelphia; J. M. Rector, Columbus, O.; Elliott P. Joslin, Boston, and Frank Smithies, Chicago.

Dr. Frank Billings, Chicago, read a paper on "Focal Infection: Its Broader Application in the Etiology of General Disease."

Dr. E. C. Rosenow, Chicago, read a paper on "The Newer Bacteriology of Various Infections Determined by Special Methods."

These two papers were discussed by Drs. William S. Thayer, Baltimore; A. C. Griffith, Kansas City, Mo.; Frank Smithies, Chicago; Emanuel Libman, New York; James M. Anders, Philadelphia; De Lancey Rochester, Buffalo, N. Y.; Alfred Stengel, Philadelphia; Frank Billings, Chicago, and E. C. Rosenow, Chicago.

Dr. C. F. Hoover, Cleveland, O., read a paper on "The Dead Space and Alveolar Air in Emphysema and Bronchial Asthma." Discussed by Drs. Allen A. Jones, Buffalo, N. Y.; George N. Jack, Buffalo, N. Y., and C. F. Hoover, Cleveland, Ohio.

THURSDAY, JUNE 25—AFTERNOON

Dr. Henry F. Stoll, Hartford, Conn., read a paper on "Late Manifestations of Inherited Syphilis with Especial Reference to Arterial Disease." Discussed by Drs. Robert N. Willson, Philadelphia; W. Y. Watson, Baltimore; A. C. Griffith, Kansas City, Mo., and Henry F. Stoll, Hartford, Conn.

Dr. W. E. Robertson and Dr. J. V. Klauder, Philadelphia, presented a paper on "Various Types of Lues: A Clinical and Laboratory Study; the Abelin Reaction; Direct Subdural Injections." Discussed by Drs. J. V. Klauder, Philadelphia; W. W. Tompkins, Charleston, W. Va., and W. E. Robertson, Philadelphia.

Dr. Graham E. Henson, Jacksonville, Fla., read a paper entitled "A Study of the Arneth Formula."

Dr. James S. Brotherhood, Clifton Springs, N. Y., read a paper on "Salvarsan in Pernicious Anemia." Discussed by Drs. W. E. Robertson, Philadelphia; W. W. Tompkins, Charleston, W. Va.; Robert N. Willson, Philadelphia; E.

Lindeman, New York; Tom A. Williams, Washington, D. C., and James S. Brotherhood, Clifton Springs, N. Y.

Dr. E. Lindeman, New York, read a paper on "The Medical Apparatus of Blood Transfusion by the Syringe-Cannula System Without Skin Incision." Discussed by Drs. G. M. Dorrance, Philadelphia; E. Adolphus Knopf, New York; E. A. Jaffin, Jersey City, N. J., and E. Lindeman, New York.

SECTION ON SURGERY

Tuesday, June 23—Afternoon

The Chairman, Dr. Charles H. Frazier, Philadelphia, called the meeting to order at 2:15 p. m. and stated that the Section would go into executive session.

Dr. F. B. Lund, Boston, presented the following motion:

Resolved, That the Section on Surgery respectfully request the House of Delegates to amend Chapter XI, Section 1 of the By-Laws by omitting from the title of the third section the words "and Abdominal Surgery," so that the title shall read, as it formerly did, "Section on Obstetrics and Gynecology."

[See Minutes of House of Delegates.]

This motion was duly seconded and carried. Dr. F. B. Lund was asked to present the motion to the House of Delegates.

Dr. Frazier then read the Chairman's address, entitled "The Cerebrospinal Fluid as a Problem in Intracranial Surgery."

Dr. Felix Landoir read a paper by Dr. Herman Küttner, Breslau, Germany, entitled "A Contribution to the Surgery of Brain Tumors." Discussed by Drs. William G. Spiller, Philadelphia, and Harvey Cushing, Boston.

Dr. Allen B. Kanavel, Chicago, read a paper entitled, "Osteoplastic Closure of the Trifacial Canals. An Experimental and Clinical Study Illustrated by Lantern-Slides." Discussed by Dr. S. J. Mixter, Boston.

Dr. Vilray P. Blair, St. Louis, read a paper entitled, "Treatment of Unlocalized Intracranial Injuries by Drainage through a Subtemporal Approach." Discussed by Drs. Charles A. Elsberg, New York; C. A. Evans, Milwaukee; C. E. Ruth, Des Moines, Iowa, and V. P. Blair, St. Louis.

Dr. Archibald MacLaren, St. Paul, read a paper entitled, "A Study of 300 Cases of Appendicitis with Special Reference to Pelvic Complications."

Dr. J. E. Moore, Minneapolis, read a paper entitled, "Has the Last Word Been Spoken Concerning Appendicitis?"

These two papers were discussed by Drs. A. J. Ochsner, Chicago; J. M. T. Finney, Baltimore, and L. Davis, Boston.

Wednesday, June 24—Morning

Dr. F. B. Lund, Boston, read a paper entitled, "Congenital Cystic Kidney." Discussed by Drs. D. N. Eisendrath, Chicago; A. L. Chute, Boston; A. D. Bevan, Chicago; A. J. Ochsner, Chicago; F. W. McRae, Atlanta, Ga., and F. B. Lund, Boston.

Dr. John B. Murphy, Chicago, read a paper entitled, "Ischemic Myositis of the Arm, Forearm and Leg, with Subsequent Contractions." Discussed by Drs. E. Laplace, Philadelphia; Dean Lewis, Chicago; Mr. Harold Collinson, Leeds, England, and Dr. J. B. Murphy, Chicago.

Dr. William L. Rodman, Philadelphia, read a paper entitled, "A Simple Method of Tapping a Distended Bladder and Making Permanent Drainage." Discussed by Drs. H. M. Chrisfian, Philadelphia, and Alexander Randall, Philadelphia.

Dr. R. Matas, New Orleans, read a paper entitled, "Testing the Efficiency of the Collateral Circulation; Its Importance in Determining Surgical Intervention and Methods of Applying the Tests."

Dr. Alexius McGlannan, Baltimore, read a paper entitled, "Aneurysm of the Posterior Tibial Artery, with Report of Two Cases."

These two papers were discussed by Drs. B. M. Bernheim, Baltimore; A. Primrose, Toronto; John W. Price, Jr., Louisville, Ky.; J. Shelton Horsley, Richmond, Va.; R. Matas, New Orleans, and A. McGlannan, Baltimore.

Dr. Axel Werelius, Chicago, read a paper entitled, "Experimental Surgery of the Heart and Lungs." Discussed by Drs. John B. Murphy, Chicago; E. Wyllys Andrews, Chicago, and Willy Meyer, New York.

The Chairman announced that he had appointed Drs. A. J. Ochsner and C. H. Mayo to take the place of absent members of the Executive Committee.

Wednesday, June 24—Afternoon

Dr. J. C. Bloodgood, Baltimore, delivered the Oration on Surgery, entitled "The Relations of the Surgeon to the Conquest of Cancer." No discussion.

Mr. F. M. Corner, London, England, read a paper entitled, "Exploration of the Knee-Joint and Its Teachings." Discussed by Drs. John B. Murphy, Chicago; H. O. Marcy, Boston; Frederick J. Fassett, Seattle, Wash., and F. M. Corner, London, England.

Dr. Charles H. Mayo, Rochester, Minn., read a paper entitled, "Exophthalmos and Methods of Surgical Treatment." Discussed by Drs. Dean Lewis, Chicago, and C. H. Mayo, Rochester, Minn.

Mr. Harold Collinson, Leeds, England, presented a paper entitled, "Some Present-Day Problems in the Surgical Treatment of Gastric and Duodenal Ulcer." Discussed by Drs. John B. Deaver, Philadelphia; A. J. Ochsner, Chicago; J. M. T. Finney, Baltimore, and Mr. H. Collinson, Leeds, England.

Dr. T. Turner Thomas, Philadelphia, read a paper entitled, "Mechanism for Injuries of the Shoulder Region: Results of Forty Operations." Discussed by Drs. A. C. Wood, Philadelphia, and T. T. Thomas, Philadelphia.

Dr. E. Wyllys Andrews, Chicago, read a paper entitled, "Operation on Thoracic Wall for Relief of Bronchial Asthma." Discussed by Drs. Samuel Robinson, Boston; Charles Goodman, New York; G. N. Jack, Buffalo, N. Y., and E. W. Andrews, Chicago.

Dr. Henry H. M. Lyle, New York, read a paper entitled, "Aperiosteal Amputation (Hirsch-Bunge)." Discussed by Drs. F. J. Cotton, Boston, and H. H. M. Lyle, New York.

Thursday, June 25—Morning

Dr. E. S. Judd, Secretary, announced the following nominations for officers for the ensuing year: Chairman, Charles H. Peck, New York; Vice-Chairman, Dr. Wallace Terry, San Francisco; Secretary, Dr. E. S. Judd, Rochester, Minn.; Orator, Dr. S. J. Mixter, Boston; Delegate, Dr. Dean Lewis, Chicago.

Dr. Frazier asked Drs. Primrose and Haggard to conduct the Chairman-Elect to the platform. Dr. C. H. Peck then said:

Mr. Chairman and Fellows of the Section: I fully appreciate the great honor you have done me in electing me to this position, an honor that I never expected to achieve, and I can only say that in payment for that I will promise to give the best that there is in me to the work of the Section during my tenure of office in maintaining its high ideals and the great influence it has and should have in the future on the surgeons and in the surgery of this country. Thank you very much.

Dr. George W. Crile, Cleveland, read a paper entitled, "Anoci-Association in Relation to Operations on the Gall-Bladder and the Stomach." Discussed by Drs. W. D. Haggard, Nashville, Tenn.; E. Laplace, Philadelphia; Robert T. Morris, New York; A. J. Ochsner, Chicago; Conrade A. Howell, Columbus, Ohio, and G. W. Crile, Cleveland.

Dr. Fred T. Murphy read a paper by himself and Dr. Barney Brooks, St. Louis, entitled, "The Problem of Intestinal Obstruction: Effort to Explain Variable Clinical and Experimental Results." Discussed by Drs. J. W. Draper, New York; John A. Hartwell, New York, and F. T. Murphy, St. Louis.

Dr. Alexander Primrose, Toronto, Ont., read a paper entitled, "Internal Hernia Due to an Aberrant Middle Colic Artery." Discussed by Drs. Charles A. Powers, Denver; W. B. Coley, New York, and E. Wyllys Andrews, Chicago.

Dr. Donald Guthrie, Sayre, Pa., read a paper entitled, "The Rodman Operation for Cancer of the Breast."

Dr. J. W. Vaughan, Detroit, read a paper entitled, "Cancer Vaccine and Anticancer Globulins as an Aid in the Surgical Treatment of Malignancy."

These two papers were discussed by Drs. Parker Sims, New York; William L. Rodman, Philadelphia; J. C. Bloodgood, Baltimore; William B. Coley, New York; N. N. Lucid, Cortland, N. Y.; Henry S. Wieder, Philadelphia; Julius H. Jacobson, Toledo, Ohio; Donald Guthrie, Sayre, Pa., and J. W. Vaughan, Detroit.

THURSDAY, JUNE 25—AFTERNOON

A joint meeting was held with the Section on Hospitals. The following papers were read as a Symposium on Surgical Service in the Hospital:

Dr. J. M. T. Finney, Baltimore: "The Standardization of the Surgeon."

Mr. F. D. Gilbreth, Providence, R. I.: "Motion Study in Surgery."

Dr. H. O. Collins, Minneapolis: "The Surgical Service in Hospitals."

These three papers were discussed by Drs. Robert L. Dickinson, Brooklyn, N. Y.; C. H. Magee, Burlington, Iowa; John A. Hornsby, Chicago; H. T. Sutton, Zanesville, Ohio, and J. M. T. Finney, Baltimore.

Dr. J. L. Yates, Milwaukee, Wis., read a paper by Dr. C. H. Bunting, Madison, Wis., and himself entitled, "Hodgkin's Disease." Discussed by Drs. George W. Crile, Cleveland; A. J. Ochsner, Chicago; E. Wyllys Andrews, Chicago, and J. L. Yates, Milwaukee, Wis.

Dr. Randolph Winslow, Baltimore, read a paper entitled, "Penetrating Wounds of the Abdomen." Discussed by Drs. E. Laplace, Philadelphia; Cunningham Wilson, Birmingham, Ala.; Jacob Frank, Chicago; Clyde S. Ford, Major U. S. A.; F. N. McRae, Atlanta, Ga.; W. L. Rodman, Philadelphia, and R. Winslow, Baltimore.

SECTION ON OBSTETRICS, GYNECOLOGY AND ABDOMINAL SURGERY

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order by the Chairman, Dr. E. Gustav Zinke, Cincinnati.

Dr. Zinke then read the Chairman's address entitled "A Few Important but Unsolved Problems in Obstetrics, Gynecology and Abdominal Surgery."

Dr. Edward J. Ill, Newark, read a paper on "The Treatment of the Albuminuria of Pregnancy."

Dr. A. J. Rongy, New York, read a paper on "The Treatment of the Toxemias of Pregnancy."

These two papers were discussed by Drs. Asa B. Davis, New York; Philip Marvel, Atlantic City, N. J.; M. Howard Fussell, Philadelphia; Charles S. Bacon, Chicago; Joseph B. DeLee, Chicago; Charles L. Bonifield, Cincinnati; Edward J. Ill, Newark, and A. J. Rongy, New York.

Dr. Edward P. Davis, Philadelphia, read a paper on "The Treatment of Placenta Praevia."

Dr. John B. Deaver, Philadelphia, read a paper on "Hysterotomy."

These two papers were discussed by Drs. Richard C. Norris, Philadelphia; George M. Boyd, Philadelphia; Damon B. Pfeiffer, Philadelphia; John O. Polak, Brooklyn; John M. Fisher, Philadelphia; A. J. Rongy, New York; Joseph B. DeLee, Chicago; Swithin Chandler, Philadelphia; E. P. Davis, Philadelphia, and John B. Deaver, Philadelphia.

WEDNESDAY, JUNE 24—MORNING

Dr. Henry O. Marcy, Boston, read a paper on "Vesicovaginal and Rectovaginal Fistulas." Discussed by Drs. J. Wesley Bovée, Washington, and Henry O. Marcy, Boston.

Dr. Thomas S. Cullen, Baltimore, read a paper on "The Embryology of the Umbilical Region" (lantern demonstration). Discussed by Drs. Henry O. Marcy, Boston, and Thomas S. Cullen, Baltimore.

The following papers were read as a Symposium on Surgery of the Large Intestine:

Dr. Arthur E. Hertzler, Kansas City, Mo.: "The Pathogenesis of the Pericolic Membranes." (Lantern demonstration.)

Dr. Joseph Rilus Eastman, Indianapolis: "Experimental and Clinical Studies of Colon Stasis." (Lantern demonstration.)

Dr. Charles L. Bonifield, Cincinnati: "The Condition of a Few Patients Two Years After Ileosigmoidostomy."

Dr. W. J. Mayo, Rochester, Minn.: "Resection of the First Portion of the Large Intestine and the Resulting Effect on Its Function." (The paper was read by Dr. Charles H. Mayo.)

Dr. Charles A. L. Reed, Cincinnati: "Some Surgical Phases of the Sigmoid." (Lantern demonstration.)

These five papers were discussed by Drs. M. L. Harris, Chicago; Joseph Sailer, Philadelphia; John H. Gibbon, Philadelphia; John B. Deaver, Philadelphia; H. Pantzer, Indianapolis; Rosalie S. Morton, New York; J. W. Long, Greensboro, N. C.; Frank C. Yeoman, New York; Robert T. Morris, New York; Thomas S. Cullen, Baltimore; J. M. Lynch, New York; Henry O. Marcy, Boston; Joseph Rilus Eastman, Indianapolis; Charles L. Bonifield, Cincinnati; Charles H. Mayo, Rochester, and Charles A. L. Reed, Cincinnati.

WEDNESDAY, JUNE 24—AFTERNOON

A joint meeting was held with the Section on Pathology and Physiology.

The following papers were read as a Symposium on Specific and Protective Ferments:

Prof. Emil Abderhalden, Halle, Germany: "The Present Status of the Investigation." (In the absence of the author the paper was read by Prof. A. J. Carlson, Chicago.)

Dr. Victor Vaughan, Ann Arbor: "Parenteral Protein Digestion."

Dr. Chester M. Echols, Milwaukee: "Limitations of the Dialysis Method as a Practical Test for Pregnancy."

Dr. Henry Schwarz, St. Louis: "The Value of Abderhalden's Biologic Reaction to the Obstetrician and Gynecologist."

These four papers were discussed by Drs. Herman J. Boldt, New York; Charles S. Bacon, Chicago; Philip Williams, Philadelphia; F. H. Falls, Chicago; Charles Goodman, New York; Michael G. Wohl, Philadelphia; Clarence F. Ball, Rutland, Vt.; O. Lowry, Newark, N. J.; A. J. Carlson, Chicago, and Henry Schwarz, St. Louis.

THURSDAY, JUNE 25—MORNING

The following officers were nominated and elected: Chairman, Dr. Thomas S. Cullen, Baltimore; Vice-Chairman, Dr. George B. Somers, San Francisco; Secretary, Dr. Brooke M. Anspach, Philadelphia; Delegate, Dr. Channing W. Barrett, Chicago; Alternate Delegate, Dr. Henry Schwarz, St. Louis.

The Committee on Nomenclature of Operations reported that it had received a large number of suggestions which were being modified, and asked the active interest of the Section in its work. Discussed by Drs. Boldt and Dickinson.

Dr. Floyd E. Keene read a paper by himself and Dr. Henry K. Pancoast, Philadelphia, on "The Present Status of Pyelography." (Lantern demonstration.) Discussed by Drs. W. F. Braasch, Rochester, Minn.; Henry Dawson Furniss, New York; D. L. Eisendrath, Chicago; Arthur E. Hertzler, Kansas City; John G. Clark, Philadelphia, and Henry K. Pancoast, Bala, Pa.

Dr. Willard Bartlett, St. Louis, read a paper on "Personal Experience With Exclusion of the Pylorus in the Treatment of Ulcer." Discussed by Drs. William L. Rodman, Philadelphia; W. D. Haggard, Nashville, W. J. Jones, Chicago, and Willard Bartlett, St. Louis.

Dr. C. E. Ruth, Des Moines, Iowa, read a paper on "Common Errors in Gall-Tract Surgery." Discussed by Drs. Frederick Cotton, Boston; Edward Martin, Philadelphia; Philander Harris, Paterson, N. J.; D. N. Eisendrath, Chicago; J. H. Carstens, Detroit; John A. McGlinn, Philadelphia; F. B. Gray, Jersey City; Channing W. Barrett, Chicago; C. E. Ruth, Des Moines, Iowa.

Dr. Angus McLean, Detroit, read a paper on "Thrombosis and Emboli: Their Significance and Consequences in Abdominal Pelvic Surgery." No discussion.

Dr. Robert L. Dickinson, Brooklyn, read a paper on "Standardization of Surgery; the Attack on the Problem." No discussion.

Dr. William Edgar Darnall, Atlantic City, read a paper on "Pelvic Varicosities: A Definite Symptom-Complex." Discussed by Drs. Laura Branson, Iowa City, Iowa; J. H. Carstens, Detroit; S. M. Miller, Peoria, Ill.; Hugo Pantzer, Indianapolis; Swithin Chandler, Philadelphia; E. Gustav Zinke, Cincinnati, and William Edgar Darnall, Atlantic City.

THURSDAY, JUNE 25—AFTERNOON

The following papers were read as a Symposium on Uterine Hemorrhage:

Dr. Emil Novak, Baltimore: "The Pathologic Physiology of Uterine Bleeding."

Dr. John G. Clark, Philadelphia: "Physiologic and Pathologic Variations of the Generative Organs Causing Atypical Bleeding; Diagnostic Aspects."

Dr. Howard A. Kelly, Baltimore: "Radium Treatment of Uterine Hemorrhage."

Dr. George E. Pfahler, Philadelphia: "Roentgen Therapy in Uterine Hemorrhage."

These four papers were discussed by Drs. C. C. Norris, Philadelphia; John A. McGlinn, Philadelphia; W. S. Newcomet, Philadelphia; Stephen E. Tracy, Philadelphia; Curtis Burnham, Baltimore; George Erety Shoemaker, Philadelphia; George C. Johnston, Pittsburgh; Emil Novak, Baltimore; John M. Fisher, Philadelphia; Howard A. Kelly, Baltimore, and George E. Pfahler, Philadelphia.

Dr. Albert Goldspohn, Chicago, read a paper on "Fundamental Intrapelvic Perineorrhaphy."

Dr. Frederick C. Holden, New York, read a paper on "Potent Factors in Failure of Operations for Retrodisplacement of the Uterus."

These two papers were discussed by Drs. George R. White, Savannah, Ga.; H. Grad, New York; John M. Fisher, Philadelphia; C. M. Echols, Milwaukee; John A. McGlinn, Philadelphia; Channing W. Barrett; Chicago; Brooke M. Anspach, Philadelphia; Albert Goldspohn, Chicago, and Frederick C. Holden, New York.

SECTION ON OPHTHALMOLOGY

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order by Dr. F. C. Todd, Chairman.

Dr. Joseph E. Willetts, Pittsburgh, called to the attention of the Section and read the report and resolutions of the committee of the Pennsylvania State Medical Society on medical expert testimony. It was moved and seconded that the Section endorse and approve the report and resolutions and that they be forwarded to the House of Delegates for consideration by that body on Wednesday. The motion carried. The resolutions and report will be found in the proceedings of the House of Delegates.

Dr. Todd read the Chairman's Address.

Dr. W. Gordon M. Byers, Montreal, read a paper on "Tumors of the Optic Nerve." Discussed by Drs. Marcus Feingold, New Orleans; G. E. de Schweinitz, Philadelphia; Edward Jackson, Denver; W. C. Posey, Philadelphia; John E. Weeks, New York; Walter R. Parker, Detroit; John O. McReynolds, Dallas, Tex.; Melancthon Foster, New Rochelle, N. Y., and W. Gordon M. Byers, Montreal.

Dr. Ward A. Holden, New York, read a paper on "Ocular Manifestations of the Toxemia of Pregnancy: Clinical Report of a Case." Discussed by Drs. R. L. Randolph, Baltimore; James Bordley, Jr., Baltimore; Allen Greenwood, Boston, and Dr. Ward A. Holden, New York.

Dr. Lee Masten Francis, Buffalo, read a paper on "Two Cases of Acute Retrobulbar Neuritis Associated with Marked Acetonuria." Discussed by Drs. G. E. de Schweinitz, Philadelphia; W. Reber, Philadelphia, and L. M. Francis, Buffalo.

Dr. F. H. Verhoeff, Boston, read a paper on "Chronic Ocular Tuberculosis: Necropsy Findings in a Case of Tuberculosis of the Hypophysis Cerebri." Discussed by Drs. Ervin Török, New York; M. Schoenberg, New York; E. V. L. Brown, Chicago; R. L. Randolph, Baltimore, and F. H. Verhoeff, Boston.

WEDNESDAY, JUNE 24—MORNING

In the absence of Dr. Adolf Alt, St. Louis, a member of the Executive Committee, Dr. W. C. Posey, Philadelphia, was appointed on that committee.

There was an exhibition of New Instruments, Appliances, etc.

Dr. Edward Jackson, Denver, exhibited and distributed test cards for the determination of refraction.

Dr. Charles H. May, New York, exhibited a new electric ophthalmoscope with a battery handle in which, he asserted, he made use of a new principle.

Dr. S. Lewis Ziegler, Philadelphia, also exhibited an improvement on his electric ophthalmoscope previously exhibited to the Section; a light for transillumination, and one with a minute point of powerful light for use in the Wernicke test; a test stand and set of cards to show the special illumination; a small stand for short range work in cases of much-lowered vision in which it is necessary to start with such a short range as 5 feet; a stand for test cards with a light so arranged that each line of letters on the card receives the same amount of illumination. Below was a set of correct cards for testing muscle balance.

Dr. D. W. Wells, Boston, exhibited an instrument in the form of a two-tined fork with very sharp points for fixation of the conjunctiva and sclera in inserting a suture.

Dr. Walter Baer Weidler, New York, exhibited a set of lacrimal probes with sharp and dull dilators.

Dr. Walter B. Lancaster, Boston, exhibited instruments for testing the strength of magnets used in extracting metal bodies from the eye.

Dr. Lucien Howe, Buffalo, described a method of making sections of the connective tissue of the orbit, especially in relation to the insertion of the muscles.

Dr. M. Feingold, New Orleans, read a description of a dry celloidin method of making sections of the whole eye, and exhibited the methods with a microtome.

Dr. Clifton M. Miller, Richmond, Va., related a case of glaucoma in an old woman in which the eye was finally removed and sections showed in the upper part hemorrhage going into the anterior chamber, dislocating the lens and entirely separating the retina, which lay at the lower part of the sections exhibited by Dr. Miller. Later the patient presented beginning glaucoma in the other eye. The blood-pressure was found to be 200, which under rest and the administration of nitrites dropped to 176. He concluded not to operate on the second eye, as the patient had 20/30 vision under the use of physostigmin (eserin). Gradually the blood-pressure dropped to 172.

Dr. Melville Black, Denver, member of the House of Delegates, asked for an expression of the sentiment of the Section on the question of printing the entire transactions of the Section in a special number of THE JOURNAL as was done last year, in order that he might present the matter to the House of Delegates.

It was moved that the delegate be instructed to use his best efforts to have the papers of the Section on Ophthalmology published in the regular way instead of in a special number of THE JOURNAL. This motion carried.

Dr. Carl Fisher, Rochester, Minn., read a paper on "Epithelioma of the Lids." Discussed by Drs. Edwin E. Jack, Boston; Edward Jackson, Denver; S. D. Risley, Philadelphia; William L. Clark, Philadelphia; E. J. Bernstein, Kalamazoo, and Carl Fisher, Rochester, Minn.

Dr. F. Phinizy Calhoun, Atlanta, Ga., read a paper on "Hereditary Glaucoma (Simplex): the Report, with Operative Notes, of Three Generations of One Family."

Dr. Walter R. Parker, Detroit, read a paper on "Sclerocorneal Trephining for Glaucoma."

Dr. E. V. L. Brown, Chicago, read a paper on "Late Infection Following a Trephining for Glaucoma."

Dr. William Campbell Posey, Philadelphia, read a paper on "Value of Miotics in Chronic Glaucoma."

These four papers were discussed by Drs. Hiram Woods, Baltimore; John E. Weeks, New York; F. E. Cheney, Boston; W. E. Gamble, Chicago; Walter L. Pyle, Philadelphia; John Green, Jr., St. Louis; Lucien Howe, Buffalo; G. E.

de Schweinitz, Philadelphia; Melville Black, Denver; M. H. Lebensohn, Chicago; W. Gordon M. Byers, Montreal; Allen Greenwood, Boston; E. C. Ellett, Memphis; L. W. Fox, Philadelphia; W. E. Lambert, New York; F. Phinizy Calhoun, Atlanta, Ga.; W. R. Parker, Detroit; E. V. L. Brown, Chicago, and W. C. Posey, Philadelphia.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. C. H. Williams, Boston, demonstrated an "anomaloscope" and a modification of a lantern to which he had added smoked glasses to obtain an intensification of colors.

Dr. Clifford B. Walker, Boston, demonstrated his instrument for the determination of the hemiopic pupillary reaction.

Dr. Nelson M. Black, Milwaukee, gave a demonstration on the standardization of signals in railway and other service, showing the effect of different colors and tints of glass in cutting out the ultraviolet rays of the spectrum or in intensifying or diminishing the light of signal-lamps.

Dr. J. Ellis Jennings, St. Louis, demonstrated a self-recording test for color-blindness.

Dr. Edward Jackson, Denver, read the report of the Committee on Education in Ophthalmology. The report will be found in the bound volume of the *Transactions* of the Section. Discussion and action on the report on motion of Dr. Jackson took place at the executive session Thursday morning.

Dr. Alexander Duane, New York, read a paper on "Convergence Insufficiency." Discussed by Drs. William N. Souter, Portsmouth, N. H.; Francis Valk, New York; D. W. Wells, Boston; Oscar Wilkinson, Washington, D. C.; George H. Price, Nashville, Tenn.; Edward Jackson, Denver, and Alexander Duane, New York.

Dr. Samuel Theobald, Baltimore, read a paper on "The Etiology of Phlyctenular Ophthalmia: Is Tuberculosis Really as Important a Factor in the Causation of this Disease as Now Commonly Taught?" Discussed by Drs. W. E. Gamble, Chicago; A. E. Davis, New York; George H. Derby, Boston; Harry Vaughan, Morristown, N. J.; Richard J. Tivnen, Chicago; Walter Baer Weidler and Thomas H. Curtin, New York; William Tarun, Baltimore; Mark Stevenson, Akron, Ohio, and Samuel Theobald, Baltimore.

Dr. William Zentmayer, Philadelphia, read a paper on "A Study of the Effect of the Correction of Ametropia on Heterophoria, with a Consideration of Some Associated Conditions." Discussed by Drs. A. E. Davis, New York; Hiram Woods, Baltimore; Edward Jackson, Denver; Francis Valk, New York; Samuel Theobald, Baltimore; George H. Price, Nashville; W. H. Bates, New York; Otis Orendorff, Canon City, Colo.; Mark Stevenson, Akron, Ohio, and William Zentmayer, Philadelphia.

THURSDAY, JUNE 25—MORNING

Dr. Albert E. Bulson, Jr., Chairman, made the following report:

The Executive Committee after due consideration has decided to recommend for your approval the following: for Chairman, E. C. Ellett, Memphis, Tenn.; for Vice-Chairman, John A. Donovan, Butte, Mont. This Section has relieved the Executive Committee of the responsibility of nominating a secretary, inasmuch as the present secretary has been elected for three years; but the Executive Committee feels that it would like to approve the work done by our very efficient secretary, Dr. George H. Derby. For delegate, Dr. Walter R. Parker, Detroit.

The Executive Committee in consideration of the recommendations in the Chairman's address has the following to offer:

We desire to approve and commend the recommendation of the Chairman for the establishment of teaching fellowships in the universities wherever suitable facilities exist, and we recommend that the plan be referred to the Council on Medical Education of the American Medical Association with the hearty endorsement of this Section.

On motion of Dr. S. D. Risley, Philadelphia, duly seconded, the report and recommendations of the Executive Committee were adopted.

The Chairman announced that three members of the Committee on Award under the provisions of the Knapp Testimonial Fund were to be elected. The following were nominated:

Dr. G. E. de Schweinitz, Philadelphia; Dr. E. V. L. Brown, Chicago; Dr. F. Phinizy Calhoun, Atlanta; Dr. S. D. Risley, Philadelphia; Dr. Hiram Woods, Baltimore.

Dr. Bulson called attention to the ineligibility for this committee of men who have papers before the Section this year. This ruled out Dr. E. V. L. Brown and Dr. F. Phinizy Calhoun.

Dr. W. C. Posey moved that the nominations be closed. Seconded and carried.

Dr. George H. Price moved that the Secretary cast the ballot of the Section for the three nominees, Drs. de Schweinitz, Risley and Wood. This motion carried and the men named were declared members of the Committee of Award of the Knapp Testimonial Fund.

The Chairman announced that the next order of business would be the report of the Knapp Testimonial Fund Committee, and Dr. A. E. Bulson, chairman of the committee in making the report said that there had been a hearty response to the request of the committee for contributions to the fund, and in the last three years the number of contributors had varied from 227 to 255. Most of the contributions were $5 and a few had contributed $10 or more. As is known, any contributor giving $5 or more gets the Year-Book, edited by Dr. Edward Jackson of Denver, and a copy of the bound *Transactions* of the Section. The subscription price of the Year-Book alone is $5 and there has been a considerable deficit connected with the publication of the volume, which Dr. Jackson has generously and uncomplainingly made up in addition to doing the large amount of work of compilation and editing. This it was felt should not continue, and inasmuch as Dr. Jackson had agreed to prepare the book for 1914, a plea was made that contributors should increase their subscriptions to the Knapp Fund to a sufficient amount to pay for the Year-Book and the bound *Transactions*. There was nothing compulsory about it, but next year the minimum subscription would be made $10. The work is invaluable to the ophthalmologist, and aside from the financial deficit which Dr. Jackson has made up, the fact that he was willing to undertake the work at all is worthy of great commendation. The money in the fund after the payment of sundry items of expense and the cost of striking off a new Knapp Fund medal, and some incidental expenses in connection with the publication of papers by men doing research who are unable to meet the charges made by the Association, will be paid to Dr. Jackson. So that the Knapp Testimonial Fund is serving a very useful purpose in promoting research work and also in furthering the interests of the Section.

Dr. Edward Jackson, Denver, presented the report of the Committee on Award, as follows:

The members of the committee, each separately, examined the papers presented at the last annual meeting of this Section and each independently arrived at the conclusion that among those papers was one worthy of the prize. There were other papers that had to be carefully considered in competition with it. But we fully united in the conclusion that this paper dealt with an important matter, judiciously reviewed the preceding literature, met by ingenious experiment the difficulties that beset the subject, recorded original observations of worth and importance, and so brought light where before had been uncertainty and confusion. For these reasons we recommend the award of the medal for the paper on the "Topical Diagnostic of the Hemiopic Pupillary Reaction and the Wilbrand Hemianopic Prism Phenomenon with a New Method of Performing the Latter," by Clifford B. Walker of Boston.

EDWARD JACKSON,
JOHN E. WEEKS,
CASEY A. WOOD.

The chairman of the Knapp Testimonial Fund Committee Dr. A. E. Bulson, Jr., then, at the request of the Chairman of the Section, presented the medal to Dr. Walker.

Dr. C. H. Williams, Boston, chairman, read the report of the Committee on Color Standards, which will appear in the *Transactions* of the Section.

It was moved that the report of the Committee on Color Vision be accepted and the committee continued for another year, with instructions to report at the next meeting of the section a standard form of instructions for the examination of the color-sense and a standard blank for recording the results of these tests.

The motion was stated and carried in the foregoing form.

Dr. Hiram Woods, Baltimore, read the report of the Committee on Optometry, of which committee Dr. W. H. Wilder was chairman, and wrote the report. The last clause

of this report or recommendation was written by Dr. Wilder, but was not concurred in by the other members of the committee. The members of the committee were Edgar Thomson, New York, E. C. Ellett, Memphis, John Green, Jr., St. Louis, Hiram Woods, Baltimore, and William H. Wilder, Chicago, chairman.

Dr. Edward Jackson moved that the report be accepted and adopted by this Section. The motion was seconded.

Dr. John Green, Jr., wished to amend the motion to the effect that the report be accepted with the omission of the last sentence.

Dr. Jackson accepted the amendment and the motion as amended carried.

The chairman called up for discussion and action the report of the Committee on Education in Ophthalmology read in the section Wednesday.

In order to get the question before the house, Dr. G. E. de Schweinitz moved that the report be adopted as read as expressing the sentiment of the Section, and at the suggestion of the chairman the motion was made to include the continuance of the committee. After considerable discussion the motion carried.

Dr. George H. Derby, Secretary, called up the point as to whether the Committee on Optometry was to be continued or discharged.

Dr. Hiram Woods moved that the committee be discharged. Seconded and carried.

The chairman called up the report of the Committee on Conservation of Vision. He explained that the report had gone to the House of Delegates as the committee was a committee of the American Medical Association, and in the absence of Dr. Frank Allport, chairman, Dr. Hiram Woods was asked to discuss the report. He stated the substance of the report and described the work of the Council on Health and Public Instruction in the way of the distribution of about twenty pamphlets whose subjects and authors he named, the conduct of a newspaper campaign, etc.

Dr. Woods moved that the report of Dr. Allport be accepted and that the secretary of the section be requested to obtain a copy from the House of Delegates for publication in the *Transactions* of the Section. Seconded and carried.

Dr. Homer E. Smith, Norwich, N. Y., read a paper on "Safe and Speedy Extraction of the Immature Cataractous Lens Following Preliminary Capsulotomy." Discussed by Drs. S. D. Risley, Philadelphia; Hiram Woods, Baltimore; Allen Greenwood, Boston; W. E. Lambert, New York; M. Feingold, New Orleans; Otis Orendorff, Canon City, Colo.; John Green, Jr., St. Louis; W. M. Sweet, Philadelphia; F. C. Todd, Minneapolis; Melville Black, Denver, and Homer Smith, Norwich, N. Y.

Dr. J. W. Jervey, Greenville, S. C., read a paper on "The Influence of Hookworm Disease on the Eyes; A Study of Fifty-Three Cases." Discussed by Drs. Charles W. Kollock, Charleston, S. C.; F. Phinizy Calhoun, Atlanta, Ga., and J. W. Jervey, Greenville, S. C.

Dr. Edward Jackson, Denver, read a paper on "International Standard for Testing Vision, and Standardizing other Visual Tests." Discussed by Drs. Nelson M. Black, Milwaukee, and Edward Jackson, Denver.

Dr. Edward Jackson, Denver, moved that the Section appoint a committee on standardizing test cards, the committee to be appointed by the chair. Seconded and carried.

Dr. S. Lewis Ziegler, Philadelphia, read a paper on "Trefoil Keratectomy." Discussed by Drs. John Green, Jr., St. Louis; John E. Virden, New York, and S. Lewis Ziegler, Philadelphia.

THURSDAY, JUNE 25—AFTERNOON

Dr. Clifford B. Walker, Boston, read a paper on "Further Observations on the Hemiopic Pupillary Reaction Obtained with a New Clinical Instrument." Discussed by Dr. Walter B. Lancaster, Boston.

Drs. H. H. Tyson and M. J. Schoenberg, New York, read a paper on "Experimental Researches in Methyl Alcohol Inhalation." Discussed by Drs. Ward A. Holden, New York; Hiram Woods, Baltimore; Edgar B. Burchell, New York, and M. J. Schoenberg, New York.

Dr. Edward Stieren, Pittsburgh, read a paper on "Enucleation with Transplantation of Fat into the Orbit." Discussed by Drs. John A. Donovan, Butte; John Green, Jr., St. Louis; W. E. Lambert, New York, and Edward B. Heckel and Edward Stieren, Pittsburgh.

Dr. Walter B. Weidler, New York, gave a lantern demonstration and description of sarcomas. No discussion.

Dr. E. C. Ellett, Memphis, Tenn., gave a description and "Demonstration of the Action of Trephining on Rabbits' Eyes." No discussion.

Dr. F. C. Todd, the retiring Chairman, presented a gavel to the section on which he proposes to have engraved the names of past chairmen of the Section, and that of the Chairman-Elect, Dr. E. C. Ellett. He was thanked by the new chairman.

Dr. G. E. de Schweinitz moved a vote of thanks to the retiring chairman for his tactful and judicial conduct of the business of the meeting, to the secretary for efficient work and to the committee of arrangements for their efforts. It was taken by consent.

Dr. Hiram Woods moved a rising vote of thanks to Dr. Todd for the gavel presented to the section.

SECTION ON DISEASES OF CHILDREN

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order by the Chairman, Dr. F. S. Churchill of Chicago. The Chairman expressed his appreciation of the honor conferred on him by his selection as Chairman, and welcomed the members of the Section.

Dr. A. W. Myers, Milwaukee, Wis., read a paper on "Some Practical Breast-Milk Problems."

Dr. Frank C. Neff, Kansas City, read a paper on "The Feeding of Skimmed Breast-Milk."

These two papers were discussed by Drs. John Zahorsky, St. Louis; Charles Douglas, Detroit; H. Lowenburg, Philadelphia; John Lovett Morse, Boston, and A. W. Myers, Milwaukee, Wis.

In the absence of Dr. Abt, Chicago, the chair appointed Dr. R. M. Smith, Boston, to serve in his place.

Dr. H. M. McClanahan, Omaha, Neb., read a paper on the "Care of Delicate and Premature Children in the Home." Discussed by Drs. Henry D. Chapin, New York; John Zahorsky, St. Louis; L. R. DeBuys, New Orleans; S. M. Hamill, Philadelphia; F. B. Talbot, Boston; F. N. Rogers, Manchester, N. H.; Henry F. Helmholz, Chicago, and H. M. McClanahan, Omaha.

Dr. Henry Dwight Chapin, Boston, read a paper on "The Physician's Function in Infant-Feeding." No discussion.

WEDNESDAY, JUNE 24—MORNING

Dr. Henry Heiman, New York, read a paper on "Refractory or So-Called 'Fast' Cases of Meningococcus Meningitis." Discussed by Drs. H. Lowenburg, Philadelphia; Roger H. Dennett, New York; John Zahorsky, St. Louis; John Lovett Morse, Boston; J. L. Hirsh, Baltimore, and Henry Heiman, New York.

Dr. Rowland Godfrey Freeman, New York, read a paper on "Urinary Analysis in the Diagnosis and Treatment of Infancy and Childhood." Discussed by Drs. J. P. Sedgwick, Minneapolis; S. M. Hamill, Philadelphia; Joseph L. Linde, New Haven, Conn.; Henry F. Helmholz, Chicago; Butterworth, Chicago; Henry Heiman, New York; Kate C. Meade, Middletown, Conn., and Rowland G. Freeman, New York.

Dr. L. R. DeBuys, New Orleans, read a paper on "Amebic Dysentery in Children." Discussed by Drs. Thomas S. Southworth, New York; Henry D. Chapin, New York; John W. Amesse, Denver; Butterworth, Chicago, and L. R. DeBuys, New Orleans.

Dr. Alfred S. Hess, New York, read a paper on "The Use of a Series of Vaccines in the Prophylaxis and Treatment of an Epidemic of Pertussis." Discussed by Drs. John Zahorsky, St. Louis; T. C. McCleave, Berkeley, Cal.; S. M. Hamill, Philadelphia; D. L. Richardson, Providence, R. I.; Kate C. Meade, Middletown, Conn.; Reimer, New York;

Henry Heiman, New York; H. Lowenburg, Philadelphia, and Alfred S. Hess, New York.

Dr. R. M. Smith, Boston, read a paper on "The Examination of the Chest in Children." Discussed by Drs. Henry Heiman, New York; Rowland Freeman, New York; S. M. Hamill, Philadelphia; H. M. McClanahan, Omaha, Neb.; Henry Dwight Chapin, New York; John Zahorsky, St. Louis, and R. M. Smith, Boston.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. Roger H. Dennett, New York, read a paper entitled "The Use of Boiled Milk in Infant-Feeding."

Dr. Jerome S. Leopold, New York, read a paper on "Experiences with Whey-Modified Milk in Infant-Feeding."

These two papers were discussed by Drs. Frank C. Neff, Kansas City, Mo.; L. T. Royster, Norfolk, Va.; H. Lowenburg, Philadelphia; Charles Douglas, Detroit; G. D. Scott, New York; John Zahorsky, St. Louis; G. W. Graves, New York; John Lovett Morse, Boston; Roger H. Dennett, New York, and Jerome S. Leopold, New York.

Dr. John Zahorsky, St. Louis, read a paper on "Experiments with Swine-Fat in Infant-Feeding."

Dr. F. W. Schultz, Minneapolis, read a paper on "The Absorption of Fat from the Intestinal Tract of the Actively Tuberculous Child." Discussed by Drs. F. B. Talbot, Boston; John Zahorsky, St. Louis, and F. W. Schultz, Minneapolis.

Dr. Thomas S. Southworth, New York, read a paper on "The Influence of Starch on Infant Digestion."

Dr. F. B. Talbot, Boston, read a paper on "The Metabolism of Carbohydrates with Special Reference to Its Effect on the Absorption of Fat and Nitrogen and on the Retention of Salts."

These two papers were discussed by Drs. Charles Douglas, Detroit; J. L. Morse, Boston; John Zahorsky, St. Louis; J. F. Sinclair, Philadelphia; H. M. McClanahan, Omaha, Neb.; H. F. Helmholz, Chicago; Thomas S. Southworth, New York, and F. B. Talbot, Boston.

THURSDAY, JUNE 25—MORNING

The following were nominated and elected as officers for the ensuing year: Chairman, Dr. L. T. Royster, Norfolk, Va.; Vice-Chairman, Dr. A. W. Myers, Milwaukee; Secretary, Dr. F. P. Gengenbach, Denver; Delegate, Dr. T. C. McCleave, Berkeley, Cal.; Alternate, Dr. F. C. Neff, Kansas City, Mo.

Dr. C. F. Judson, Philadelphia, read a paper on "Blood-Pressure in Normal Children."

Dr. John Lovett Morse, Boston, read a paper entitled "A Study of the Blood-Pressure in Anemia in Infancy." Discussed by Drs. May Michael, Chicago; R. Hill, Philadelphia; L. F. Bishop, New York; John Ritter, Chicago; S. M. Hamill, Philadelphia; C. F. Judson, Philadelphia, and J. L. Morse, Boston.

Dr. C. H. Dunn, Boston, read a paper on "A contribution to the Diagnosis and Prognosis of Congenital Cardiac Disease." Discussed by Drs. F. W. Schultz, Minneapolis; H. F. Helmholz, Chicago; John Zahorsky, St. Louis; L. T. Bishop, New York; Allen, Holyoke, Mass.; J. P. Sedgwick, Minneapolis; J. L. Morse, Boston, and C. H. Dunn, Boston.

Dr. Henry F. Helmholz, Chicago, read a paper on "Further Observations Concerning the Relation of Heat to Infant Mortality." Discussed by Drs. L. T. Royster, Norfolk, Va.; Julius Levy, Newark, N. J.; R. M. Smith, Boston; Charles Douglas, Detroit; W. W. Butterworth, New Orleans; S. M. Burton, Albuquerque, N. Mex.; Ilway, New York; L. W. Elias, Asheville, N. C.; T. C. McCleave, Berkeley, Cal., and H. F. Helmholz, Chicago.

Dr. H. Lowenburg, Philadelphia, read a paper on "A Further Clinical Study of the Efficiency of Sodium Chlorid in the Therapeutics of Bright's Disease." Discussed by Drs. Julius Levy, Newark, N. J.; Thomas S. Southworth, New York; John Zahorsky, St. Louis; Percival Nicholson, Ardmore, Pa., and H. Lowenburg, Philadelphia.

Dr. Julius H. Comroe, York, Pa., read a paper on "The Use and Abuse of the Tonsils." Discussed by Drs. John Zahorsky, St. Louis; Thomas S. Southworth, New York, and J. H. Comroe, York, Pa.

THURSDAY, JUNE 25—AFTERNOON

Dr. T. C. McCleave, Berkeley, Cal., read a paper on "The Relation of Bovine Tuberculosis to Early Tuberculosis in Childhood." Discussed by Drs. P. L. Coit, Trenton, N. J.; John Ritter, Chicago; Julius Levy, Newark, N. J.; R. M. Smith, Boston; H. F. Helmholz, Chicago; Charles Douglas, Detroit, and T. C. McCleave, Berkeley, Cal.

Dr. E. A. Park, Baltimore, read a paper on "Thoracic Complications of Rickets." Discussed by Drs. Maurice Ostheimer, Philadelphia; J. Howland, Baltimore; H. T. Price, Pittsburgh; J. H. McKee, Philadelphia, and E. A. Park, Baltimore.

Dr. Maurice Ostheimer, Philadelphia, read a paper on "Fragilitas Ossium." Discussed by Drs. E. A. Park, Baltimore; F. A. Conlon, Lawrence, Mass., and Maurice Ostheimer, Philadelphia.

F. X. Walls, Chicago, read a paper on "Treatment of Inguinal Hernia in Infants." No discussion.

After the installation of officers, the chairman appointed S. M. Hamill, Philadelphia, and F. S. Churchill, Chicago, a committee to look into the possibilities of increasing and improving the Section on Diseases of Children.

SECTION ON PHARMACOLOGY AND THERAPEUTICS

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order at 2:15 p. m., by the Chairman, Dr. John F. Anderson, Washington, D. C.

Dr. Anderson then read his Chairman's Address, entitled "Some Unhealthy Tendencies in Therapeutics." No discussion.

Dr. Cary Eggleston, New York, read a paper by Dr. Robert A. Hatcher, New York, and himself, entitled "Studies on the Absorption of Drugs." Discussed by Drs. Samuel James Meltzer, New York; Solomon Solis Cohen, Philadelphia, and Cary Eggleston, New York.

Dr. Ray L. Wilbur, San Francisco, read a paper on "The Therapeusis of Pericarditis." Discussed by Dr. Samuel James Meltzer, New York.

Dr. Lawrence Litchfield, Pittsburgh, read a paper on "The Abuse of Normal Salt Solution." Discussed by Drs. John F. Anderson, Washington, D. C.; Ray L. Wilbur, San Francisco; John A. Lichty, Pittsburgh, and Lawrence Litchfield, Pittsburgh.

Dr. L. H. Newburgh, Boston, read a paper on "Therapy of Cardiovascular Disturbances." Discussed by Drs. D. F. Johnson, Pittsburgh; Lawrence Litchfield, Pittsburgh; Bernard Fantus, Chicago; L. P. Hamburger, Baltimore; J. A. Williams, Chicago, and L. H. Newburgh, Boston.

Dr. J. H. Austin, Philadelphia, read a paper on "The Effects of Vapor Baths on the Total Non-Coagulable Nitrogen of the Blood in Nephritis." No discussion.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. William S. Newcomet, Philadelphia, read a paper on "Radium and Roentgen Rays in Radiotherapy: Their Use and Limitations." Discussed by Dr. John F. Anderson, Washington, D. C.

Dr. George C. Johnston, Pittsburgh, read a paper on "The Place of the Roentgen Ray in Therapeutics." Discussed by Drs. Henry K. Pancoast, Bala, Pa.; Arthur F. Holding, New York; William Dwayne, Boston; A. L. Gray, Richmond, Va.; James W. Hunter, Norfolk, Va.; George E. Pfahler, Philadelphia; G. P. Massey, Philadelphia; William L. Clark, Philadelphia; George C. Johnston, Pittsburgh, and William S. Newcomet, Philadelphia.

Dr. A. D. Whiting, Philadelphia, read a paper on "Local Preparation of Patients for Operation." Discussed by Dr. Bastedo, New York. Dr. George P. Muller, Philadelphia, read a paper on "Postoperative Treatment of Surgical Cases."

Discussed by Drs. W. A. Bastedo, New York; A. P. Butt, Davis, W. Va.; R. A. Hatcher, New York; A. D. Whiting, Philadelphia; George P. Muller, Philadelphia; T. F. Riley, New York, and George Parker, Peoria, Ill.

Dr. George B. Roth, Washington, D. C., read a paper on "An Examination of Some Commercial Preparations of Pituitary Extract Made from the Posterior Lobe of the Pituitary Body." Discussed by Drs. Solomon Solis Cohen, Philadelphia; R. A. Hatcher, New York, and George B. Roth, Washington, D. C.

Mr. M. I. Wilbert, Washington, D. C., secretary, announced an application received from the secretary of the American Pharmaceutical Association for pharmaceutical membership in the American Medical Association. Mr. Wilbert moved that endorsement of the application for membership be made. Seconded by Dr. Solomon Solis Cohen, Philadelphia. Motion carried.

THURSDAY, JUNE 25—MORNING

The Nominating Committee for election of officers nominated the following officers, who were elected, the Secretary being instructed to cast the ballot for the nominees: Chairman, Dr. R. A. Hatcher, New York; Vice-Chairman, Dr. J. R. Arneil, Denver; Secretary, Mr. M. I. Wilbert, Washington, D. C.; Delegate, Dr. John F. Anderson, Washington, D. C.; Alternate, Dr. Ray L. Wilbur, San Francisco.

The following papers were read as a Symposium on the Prevention and Treatment of Diphtheria:

Dr. William H. Park, New York: "Active Immunization in Diphtheria by Toxin-Antitoxin Mixtures."

Dr. Samuel S. Woody, Philadelphia: "The Use of Diphtheria Antitoxin in the Treatment of Diphtheria."

These two papers were discussed by Drs. Lewellys F. Barker, Baltimore; John F. Anderson, Washington, D. C.; P. S. Roy, Washington, D. C.; Guy L. Kiefer, Detroit; D. L. Richardson, Providence, R. I.; W. W. Tompkins, Charleston, W. Va.; J. J. Kinyoun, Washington, D. C.; William H. Park, New York, and Samuel S. Woody, Philadelphia.

The following papers were read as a Symposium on Diet in Typhoid Fever:

Dr. Lewellys F. Barker, Baltimore: "Diet in Typhoid Fever."

Dr. Warren Coleman, New York: "The Effects of Food on Metabolism in Typhoid Fever."

These two papers were discussed by Drs. Lawrence Litchfield, Pittsburgh; O. T. Osborne, New Haven, Conn.; Allan C. Eustis, New Orleans; Philip S. Roy, Washington, D. C.; Lewellys F. Barker, Baltimore, and Warren Coleman, New York.

Dr. Joseph L. Miller, Chicago, read a paper on "The Value of Salicylates in Acute Articular Rheumatism." Discussed by Drs. Warren Coleman, New York; Lawrence Litchfield, Pittsburgh; Bernard Fantus, Chicago, and Joseph L. Miller, Chicago.

Dr. William Salant, Washington, D. C., read a paper on "The Pharmacology of Sodium Tartrate." No discussion.

THURSDAY, JUNE 25—AFTERNOON

A joint meeting was held with the Section on Preventive Medicine and Public Health, at which papers were read in a Symposium on Pellagra. For the report of the proceedings, see the minutes of the Section on Preventive Medicine and Public Health.

SECTION ON PATHOLOGY AND PHYSIOLOGY

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order at 2:15 p. m. by the chairman, Dr. William Ophüls, San Francisco.

Dr. Ophüls then read his chairman's address, entitled "Anatomic Structure and Function." No discussion.

Dr. J. C. Friedman, New York, read a paper entitled "Experimental Chronic Gastric Ulcer." Discussed by Prof. A. J. Carlson, Chicago and Drs. E. C. Rosenow, Chicago, and J. C. Friedman, New York.

Dr. J. W. Draper, New York, presented "Studies on Duodenal Obstruction." Discussed by Dr. J. C. Bloodgood, Baltimore.

Dr. J. T. Case, Battle Creek, Mich., read a paper entitled "Roentgenographic Studies of the Function of the Ileocolic Valve." Discussed by Drs. Cole, New York; Walter B. Cannon, Boston; Prof A. J. Carlson, Chicago; A. C. Eustis, New Orleans; Seymour Basch, New York; E. C. Rosenow, Chicago; G. E. Pfahler, Philadelphia, and Thomas A. Groover, Washington, D. C.

Dr. F. M. Allen, New York, read a paper on "Studies in Experimental Diabetes." Discussed by Prof. A. J. Carlson, Chicago, and Dr. Eustis, New Orleans.

Prof. A. J. Carlson, Chicago, presented a paper entitled "Blood Transfusion in Pancreatic Diabetes." No discussion.

Dr. L. F. Watson, Oklahoma City, Okla., read a paper on "Urea and Quinin Injection in Goiter." No discussion.

WEDNESDAY, JUNE 24—MORNING

A joint meeting was held with the Section on Practice of Medicine. For a report of the proceedings, see the minutes of that Section.

WEDNESDAY, JUNE 24—AFTERNOON

A joint meeting was held with the Section on Obstetrics, Gynecology and Abdominal Surgery. For a report of the proceedings, see the minutes of that Section.

THURSDAY, JUNE 25—MORNING

Meeting called to order by the Chairman, Dr. William Ophüls, San Francisco, at 9 a. m.

The following officers were nominated by the Nominating Committee and unanimously elected, the Secretary being instructed to cast the ballot: Chairman, Prof. A. J. Carlson, Chicago; Vice-Chairman, Dr. L. B. Wilson, Rochester, Minn.; Secretary, Dr. Frederick P. Gay, Berkeley, Cal.

Dr. L. D. Bulkley, New York, read a paper entitled "Relation of Diet to Cancer." Discussed by Prof. A. J. Carlson, Chicago.

Dr. Maude Slye, Chicago, presented a paper on "The Influence of Heredity on the Incidence of Cancer in Mice." Discussed by Drs. F. M. Baeslack, Detroit; L. D. Bulkley, New York; G. Ludn, Rochester, N. Y.; H. C. Schmeisser, Baltimore, and Prof. A. J. Carlson, Chicago.

Dr. C. F. Ball, Rutland, Vt., read a paper on "Abderhalden's Test in the Diagnosis of Cancer."

Dr. F. H. Falls, Chicago, read a paper on "A Study of the Ferment Activity of the Blood-Serum During Pregnancy and Under Normal Pathologic Conditions by the Abderhalden Method."

These two papers were discussed by Drs. Charles Goodman, New York, who presented a lantern-slide demonstration; M. G. Wohl, Philadelphia; C. P. McCord, Detroit; C. F. Ball, Rutland, Vt.; F. H. Falls, Chicago, and Prof. A. J. Carlson, Chicago.

Dr. D. S. D. Jessep, New York, presented "Adenomyoma of the Rectovaginal Septum." No discussion.

Dr. B. F. McGrath, Rochester, Minn., read a paper on "Carcinoma of the Prostate." No discussion.

Dr. C. P. McCord, Detroit, read a paper on "The Pineal Gland in Relation to Somatic, Sexual and Mental Development." No discussion.

THURSDAY, JUNE 25—AFTERNOON

Dr. L. F. Bishop, New York, read a paper on "The Pathologic Physiology of Arteriosclerosis." Discussed by Dr. W. M. L. Coplin, Philadelphia.

Dr. G. B. Webb, Colorado Springs, read a paper on "Immunity in Tuberculosis." Discussed by Drs. William Ophüls, San Francisco, and G. B. Webb, Colorado Springs.

Dr. R. B. H. Gradwohl, St. Louis, read a paper on "The Hect-Weinberg Complement-Fixation Test as a Control Over the Wassermann." No discussion.

Dr. W. McKim Marriott, St. Louis, read a paper on "The Blood in Acidosis from the Quantitative Point of View." Discussed by Prof. A. J. Carlson, Chicago, and Dr. W. McKim Marriott, St. Louis.

SECTION ON STOMATOLOGY

TUESDAY, JUNE 23—MORNING

The meeting was called to order at 2 p. m. by the Chairman, Dr. William C. Fisher, New York.

Dr. Talbot presented next the following list of proposals for membership to the Section: R. R. Johnson, Great Falls, Mont.; L. D. Idleton, Pendleton, Ore.; Leland Barrett, New York City; Weston A. Price, Cleveland, Ohio; Lieut. E. R. R. Ryan, U. S. Army; Lieut. F. L. K. Laflamme, U. S. Army; Lieut. George D. Graham, U. S. Army.

Dr. Moorehead moved that the list of applications for membership be referred to the House of Delegates for action.

Dr. Fisher then read the Chairman's address. Discussed by Drs. F. B. Moorehead, Chicago; J. S. Marshall, Berkeley, Cal.; H. L. Wheeler, New York; E. S. Talbot, Chicago; M. I. Schamberg, New York; G. V. I. Brown, Milwaukee, R. H. Ivy, Philadelphia, and W. C. Fisher, New York.

Dr. R. H. Ivy, Philadelphia, read a paper entitled "Mesothelial Tumors of the Jaw." Discussed by Drs. R. P. Bay, Baltimore; Virgil Loeb, St. Louis; M. I. Schamberg, New York; F. B. Moorehead, Chicago; C. K. Teter, Cleveland; T. L. Gilmer, Chicago; J. S. Marshall, Berkeley, Cal., and R. H. Ivy, Philadelphia.

Dr. T. L. McCurdy, Pittsburgh, read a paper entitled "Differential Diagnosis of Major Mouth Lesions."

Dr. Herbert L. Wheeler, New York, read a paper entitled "Methods of Obtaining Dental Service in Hospitals by the Appointment of Interns." Discussed by Drs. W. C. Fisher, New York; R. H. Ivy, Philadelphia; M. H. Cryer, Philadelphia; T. L. Gilmer, Chicago; M. I. Schamberg, New York; G. V. I. Brown, Milwaukee; A. D. Black, Chicago; T. F. Tholen, Los Angeles; E. A. Bogue, New York, and H. L. Wheeler, New York.

Dr. Fisher, the Chairman, appointed Dr. J. S. Marshall to take the place of Dr. McCurdy on the Executive Committee and also asked the Executive Committee to act as Nominating Committee.

WEDNESDAY, JUNE 24—MORNING

Dr. Talbot, the Secretary, presented two additional applications for membership, from Dr. B. C. Brown, Baltimore, and Dr. Cornelia B. Inglis, Swarthmore, Pa.

Dr. F. B. Moorehead, Chicago, moved that these names be added to the list presented on Tuesday to be sent to the House of Delegates for action.

Motion carried.

Dr. G. V. I. Brown, Milwaukee, read a paper entitled "The Section on Stomatology as a Factor in the Evolution of Dental and Medical Science." Discussed by Drs. Joseph Head, Philadelphia; F. B. Moorehead, Chicago; A. D. Black, Chicago; E. S. Talbot, Chicago; W. C. Fisher, New York; H. L. Wheeler, New York, and G. V. I. Brown, Milwaukee.

Dr. Frank Billings, Chicago, read a paper on "Mouth Infections as a Source of Systemic Disease."

Dr. T. L. Gilmer, Chicago, read a paper entitled "A Study of the Bacteriology of Alveolar Abscess."

These two papers were discussed by Drs. A. D. Black, Chicago; M. I. Schamberg, New York; V. P. Blair, St. Louis; Price; F. B. Moorehead, Chicago; W. C. Fisher, New York; J. S. Marshall, Los Angeles; G. V. I. Brown, Milwaukee; Frank Billings, Chicago, and T. L. Gilmer, Chicago.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. A. H. Levings, Milwaukee, read a paper entitled "What Shall Be the Content for a Course in Oral Surgery in Our Dental Schools?" Discussed by Drs. F. B. Moorehead, Chicago; M. J. Schamberg, New York; J. A. Pettit, Portland, Ore.; V. P. Blair, St. Louis; M. H. Cryer, Philadelphia; J. G. Sharp, San Francisco; G. V. I. Brown, Milwaukee; T. L. Gilmer, Chicago; T. E. Carmody, Denver; A. D. Black, Chicago, and A. H. Levings, Milwaukee.

Dr. Virgil Loeb, St. Louis, read a paper entitled "Acute Parenchymatous Glossitis." Discussed by Drs. Gordon New, Rochester, Minn.; T. L. Gilmer, Chicago; F. B. Moorehead, Chicago; Bloom; M. J. Schamberg, New York; A. H. Levings, Milwaukee, and V. Loeb, St. Louis.

THURSDAY, JUNE 25—MORNING

The first order of business was the report of the Nominating Committee, as follows: Chairman, Dr. F. B. Moorehead, Chicago; Vice-Chairman, Arthur D. Black, Chicago; Secretary, Dr. Eugene S. Talbot, Chicago (two years); delegate to House of Delegates, Dr. G. V. I. Brown, Milwaukee.

Dr. Loeb moved that the Secretary be instructed to cast one ballot for the list of nominations. Motion carried.

The Secretary presented the name of Dr. S. Whitford Moore, Baltimore, for membership.

Dr. Moorehead moved that the name be held over until next year for action. Motion carried.

Dr. Gordon New, Rochester, Minn., read a paper on "Cystic Tumors of the Jaw." Discussed by Drs. F. B. Moorehead, Chicago; T. L. Gilmer, Chicago; M. I. Schamberg, New York; Bloom; C. K. Teter, Cleveland, and Gordon New, Rochester, Minn.

Dr. Joseph Head, Philadelphia, read a paper on "The Scientific Routine of Tooth-Brushing and Mouth-Cleansing." Discussed by Dr. William C. Fisher, New York.

Dr. Wayne W. Babcock, Philadelphia, read a paper entitled "Osteoplastic Surgery of the Face." Discussed by Drs. M. I. Schamberg, New York; H. S. Dunning, New York, and W. W. Babcock, Philadelphia.

Dr. H. S. Dunning, New York, read a paper on "Fractures of the Inferior Maxillary." Discussed by Drs. G. V. I. Brown, Milwaukee, Wis.; M. I. Schamberg, New York; Bloom; W. W. Babcock, Philadelphia, and H. S. Dunning, New York.

THURSDAY, JUNE 25—AFTERNOON

Dr. D. H. Squire, Buffalo, read a paper entitled "The Peridental Membrane as a Source of Infection."

Dr. Edward C. Rosenow, Chicago, read a paper on "Mouth Infection as a Source of Systemic Disease."

Dr. Charles T. Mayo, Rochester, Minn., read a paper on "Mouth Infection as a Source of Systemic Disease."

These three papers were discussed by Drs. Charles H. Mayo, Rochester, Minn.; W. O. Bridges, Omaha; Frauenthal, New York; T. W. Corwin, Newark, N. J.; W. K. Mercer, Pittsburgh, and M. I. Schamberg, New York.

Dr. C. B. Craig, New York, read a paper entitled "Mouth Infection in Relation to Nervous Infection." Discussed by Drs. M. I. Schamberg, New York; I. A. Pettit, Portland, Ore., and Bloom.

SECTION ON NERVOUS AND MENTAL DISEASES

TUESDAY, JUNE 23—AFTERNOON

The Section was called to order by the Chairman, Dr. W. W. Graves, St. Louis.

Dr. Graves then read the Chairman's Address, entitled "Some Factors Tending Toward Adequate Instruction in Nervous and Mental Diseases."

Discussed by Drs. Charles H. Hughes, St. Louis; George Dock, St. Louis; E. E. Southard, Boston; C. R. Woodson, St. Joseph, Mo.; Walter B. Swift, Boston; Charles R. Ball, St. Paul; Hugh T. Patrick, Chicago, and W. W. Graves, St. Louis.

Dr. N. S. Yawger, Philadelphia, read a paper on "Tuberous Sclerosis and Other Unusual Features in Epilepsy." Discussed by Drs. Alfred Gordon, Philadelphia; William G. Spiller, Philadelphia, and N. S. Yawger, Philadelphia.

Dr. H. H. Drysdale, Cleveland, read a paper on "Juvenile Psychosis: Report of a Case." Discussed by Drs. Walter B. Swift, Boston; Frank P. Norbury, Springfield, Ill.; C. R. Woodson, St. Joseph, Mo.; C. D. Crothers, Hartford, Conn.; Tom A. Williams, Washington, D. C.; Alfred Gordon, Philadelphia; J. T. Fisher, Los Angeles, and H. H. Drysdale, Cleveland.

Dr. Alfred Gordon, Philadelphia, read a paper on "Nervous and Mental Disturbances Following Castration in Women." Discussed by Drs. Walter B. Swift, Boston; Joseph M. Aikin, Omaha; Frank R. Starkey, Philadelphia; William M. Leszynsky, New York; Hugh T. Patrick, Chicago; Charles R. Ball, St. Paul; Charles H. Hughes, St. Louis and Alfred Gordon, Philadelphia.

Dr. William G. Spiller, Philadelphia, read a paper on "Acute Myelitis, Secondary to Perirectal Abscess, Developing a Few Hours After Severe Fright." Discussed by Drs. Hugh T. Patrick, Chicago; Frank P. Norbury, Springfield, Ill.; C. D. Camp, Ann Arbor, Mich.; Charles K. Mills, Philadelphia; E. E. Southard, Boston; Wilfred Harris, London, England; Walter B. Swift, Boston, and William G. Spiller, Philadelphia.

Wednesday, June 24—Morning

Dr. Edward D. Fisher, New York, read a paper on "Landry's Paralysis: Report of a Case with Necropsy." Discussed by Drs. Walter B. Swift, Boston, and Edward D. Fisher, New York.

Dr. A. C. Gillis, Baltimore, read a paper on "Occlusion of the Posterior-Inferior Cerebellar Artery: Report of Cases." Discussed by Drs. William G. Spiller, Philadelphia; Ernest M. Hammes, St. Paul; Wilfred Harris, London, England, and A. C. Gillis, Baltimore.

The Chairman announced the following to act as a Nominating Committee: Drs. Hugh T. Patrick, Chicago; Edward D. Fisher, New York, and T. H. Weisenburg, Philadelphia. The committee was asked to make its recommendations Thursday morning.

Dr. Ernest M. Hammes, St. Paul, read a paper on "Results Following Seventy-Five Injections of Salvarsanized Serum." Discussed by Drs. C. Eugene Riggs and Ernest M. Hammes, St. Paul.

Dr. L. B. Pilsbury, Lincoln, Neb., read a paper on "A Brief Report on Cases of Paresis Treated by Intraspinal Injections of Salvarsanized Serum."

These two papers were discussed by Drs. Charles R. Ball, St. Paul; G. Wilse Robinson, Kansas City, Mo.; B. D. Lowery, Jackster, N. J.; H. F. Stoll, Hartford, Conn.; R. Harvey Cook, Oxford, Ohio; Frank R. Starkey, Philadelphia; W. W. Graves, St. Louis; C. R. Woodson, St. Joseph, Mo.; George P. Sanborn, Boston, and C. C. Wholey, Pittsburgh. The remainder of the discussion was postponed to the afternoon session.

The Section then adjourned and reconvened in the amphitheater of the Exposition building.

Dr. E. E. Southard, Boston, introduced a resolution, which will be found in the minutes of the House of Delegates, requesting the Council on Health and Public Instruction to consider and act on the advisability of: (*a*) including mental hygiene among the public health problems which said council is investigating; (*b*) taking steps to educate the public on all appropriate topics of mental hygiene, and (*c*) establishing a subcommittee on mental hygiene, empowered to confer and if desirable cooperate with official and voluntary organizations. [The House of Delegates referred this resolution to the Council on Health and Public Instruction.]

On motion, carried, Dr. Southard was instructed to present the resolution to the House of Delegates.

Dr. Charles K. Mills, Philadelphia, then presented a summary of his paper on "Cerebellar Symptoms and Localization," and Dr. T. H. Weisenburg, Philadelphia, gave a commentary on the lantern-slides and moving pictures illustrating the paper.

Dr. Isaac H. Jones, Philadelphia, presented a series of motion-pictures demonstrating the Vestibular Apparatus, Nystagmus and Barassy Pointing Reactions. Discussed by Drs. Harvey Cushing, Baltimore; Otfrid Foerster, Breslau, Germany; William G. Spiller, Philadelphia, and Charles K. Mills and T. H. Weisenburg, Philadelphia.

Wednesday, June 24—Afternoon

The discussion of papers by Drs. C. Eugene Riggs, Ernest M. Hammes, and L. B. Pilsbury, postponed from the morning session, was then resumed, Drs. Hammes and Pilsbury closing.

Dr. D. J. McCarthy, Philadelphia, read a paper on "Ankylosis of the Shoulder-Joint in Association with Brachial Neuritis and Pulmonary Lesion of the Right Lung." Discussed by Drs. Charles K. Mills, Philadelphia; John H. W. Rheim, Philadelphia; Tom A. Williams, Washington, D. C.; Hugh T. Patrick, Chicago, and D. J. McCarthy, Philadelphia.

The Chairman announced that Drs. J. T. Fisher, Los Angeles, and Morris J. Karpas, New York, were appointed members of the Executive Committee, to take the place of Drs. W. A. Jones, Minneapolis, and Edward D. Fisher, New York, who were absent.

Dr. Henry A. Cotton, Trenton, N. J., read a paper on "The Value of Early Diagnosis in Syphilis of the Central Nervous System: Its Relation to Treatment." Discussed by Drs. Tom A. Williams, Washington, D. C.; Ross Moore, Los Angeles; G. Wilse Robinson, Kansas City, Mo.; Charles R. Ball, St. Paul; George A. Moleen, Denver, and Henry A. Cotton, Trenton.

Dr. Otfrid Foerster, Breslau, Germany, read a paper on "The Borders of the Areas of Anesthesia, Analgesia and Thermo-Anesthesia in Lesions at Different Levels of the Sensory Tract." Discussed by Drs. Charles K. Mills, Philadelphia; Hugh T. Patrick, Chicago; W. W. Graves, St. Louis, and Otfrid Foerster, Breslau, Germany.

On motion by Dr. Hugh T. Patrick, Chicago, a vote of thanks was extended to Dr. Foerster for the presentation of his paper.

Dr. John H. W. Rheim, Philadelphia, read a paper on "Tumors of the Crus." No discussion.

Dr. Walter B. Swift, Boston, read a paper on "(I.) A New Method of Reflex Elicitation: Preliminary Note. (II). Further Analysis of the Voice Sign in Chorea." Discussed by Drs. J. T. Fisher, Los Angeles; W. W. Graves, St. Louis, and Walter B. Swift, Boston.

Thursday, June 25—Morning

The Chairman announced that as two members of the Nominating Committee had not arrived, election of officers would be postponed until later in the session.

Dr. Hugh T. Patrick, Chicago, moved that the Section nominate for Honorary Fellowship in the American Medical Association two distinguished foreign guests, Dr. Otfrid Foerster, Breslau, Germany, and Dr. Wilfred Harris, London, England, and that the Secretary be instructed immediately to communicate this action to the Secretary of the Association. Motion seconded and carried. It was so ordered.

The following papers were read as a symposium on the Problem of the Prevention of Nervous and Mental Diseases, in two parts: Part I:

Dr. James J. Putnam, Boston: "A Brief Summary and Analysis of the Work Done by Psychanalysts, with Reference to the Diagnosis and Treatment of the Psychoses; What Contribution can Psychanalysis Make Toward This End?"

Dr. Donald Gregg, Brookline, Mass: "Genetic Factors in One Hundred Cases of Psychoneuroses."

Dr. E. E. Southard, Boston: "The 'Not Insane' and 'Voluntary' Admissions to the Psychopathic Hospital, Boston."

The papers of Part I of the symposium were discussed by Drs. D. J. McCarthy, Philadelphia; Walter B. Swift, Boston; W. T. Councilman, Boston; Hugh T. Patrick, Chicago; Frank P. Norbury, Springfield, Mass.; M. A. Hallowell, Vineland, N. J.; A. C. Gillis, Baltimore; James J. Putnam, Boston; Donald Gregg, Brookline, Mass., and E. E. Southard, Boston.

The following officers were elected for the ensuing year: Chairman, F. X. Dercum, Philadelphia; Vice-Chairman, H. G. Brainard, Los Angeles; Secretary, George A. Moleen, Denver; Delegate, W. W. Graves, St. Louis.

Papers composing the remainder of the symposium were read as follows: Part II:

Dr. Ross Moore, Los Angeles: "Present Teaching of Psychiatry in American Medical Schools."

H. Douglas Singer, Hospital, Ill.: "The Ideal Course in Psychiatry for Medical Schools."

The papers of Part II of the symposium were discussed by C. W. Burr, Philadelphia. The remainder of discussion was postponed to afternoon session.

Dr. Ross Moore, Los Angeles, offered the following resolution:

Resolved, That it is the sense of the Section on Nervous and Mental Diseases of the American Medical Association that the present methods of teaching psychiatry in a large percentage of American medical colleges are inadequate. They are inadequate chiefly because of lack of

time given the subject by curriculum committees and because of the absence of psychiatric clinics. The Section recommends that more attention be given this matter in the future, especially by the Council on Medical Education. [Referred to Council on Medical Education.]

The resolution was adopted, and the Secretary was requested to transmit a copy to the House of Delegates through the representative of the Section.

THURSDAY, JUNE 25—AFTERNOON

Discussion of Part II of the symposium presented at the morning session was continued by Drs. C. R. Woodson, St. Joseph, Mo.; James J. Putnam, Boston; J. T. Fisher, Los Angeles; Frank P. Norbury, Springfield, Ill.; Ross Moore, Los Angeles, and H. Douglas Singer, Hospital, Ill.

Dr. C. D. Camp, Ann Arbor, offered a resolution confirming Dr. Moore's resolution of the day before.

On motion, carried, the foregoing resolution was adopted.

Dr. Wilfred Harris, London, England, read a paper on "Some Experiences with Alcohol Injection in Trigeminal and Other Neuralgias." Discussed by Drs. Charles R. Ball, St. Paul; Peter Bassoe, Chicago; C. D. Camp, Ann Arbor; George A. Moleen, Denver, and Wilfred Harris, London.

On motion, a rising vote of thanks was extended to Dr. Harris for his attendance at the meeting and for the presentation of his paper.

Dr. G. Wilse Robinson, Kansas City, Mo., read a paper on "The Use of Celluloid Splints in the Treatment of Diseases of the Nervous System." No discussion.

Dr. Robert Foster Kennedy, New York, read a paper on "Acute Disseminated Sclerosis and its Visual Symptoms." Discussed by Drs. George A. Moleen, Denver; Peter Bassoe, Chicago; W. W. Graves, St. Louis, and Robert Foster Kennedy, New York.

Dr. S. Leopold, Philadelphia, read a paper on "Subarachnoid Hemorrhage: A Contribution to the Subject of Spontaneous Hemorrhage." Discussed by Dr. W. W. Graves, St. Louis.

Dr. Morris J. Karpas, New York, read a paper on "Kraepelin's Conception of Paraphrenia." Discussed by Drs. H. Douglas Singer, Hospital, Ill.; L. B. Pilsbury, Lincoln, Neb., and Morris J. Karpas, New York.

Dr. Charles A. McKendree, Cromwell, Conn., read a paper on "A Case of Myasthenia Gravis." Discussed by Dr. George A. Moleen, Denver.

Dr. William W. Graves, the retiring Chairman, thanked the members for their assistance in carrying out what he believed to be the most successful program in the history of the Section, calling attention to the fact that out of thirty papers on the program, twenty-six were presented in person by the authors. And he further stated that without doubt the work relating to education in nervous and mental diseases which has had its inception in this meeting, would go on, and that the time will come when nervous and mental diseases will be properly considered in medical schools.

SECTION ON DERMATOLOGY

TUESDAY, JUNE 23—AFTERNOON

The Chairman, Dr. Richard L. Sutton, Kansas City, called the meeting to order at 2:15 p. m.

In the absence of Dr. Joseph Zeisler, Chicago, the chairman appointed Dr. M. L. Heidingsfeld, Cincinnati, to serve on the Executive Committee.

The Chairman announced the following to act as a Nominating Committee: Drs. S. E. Sweitzer, Minneapolis; Clarence Baer, Milwaukee, and Ernest L. McEwen, Chicago.

Dr. Sutton then read the Chairman's Address, entitled "The Future of Dermatology in America."

Dr. M. B. Hartzell, Philadelphia, read a paper on "Granuloma Annulare, with a Report of Four Cases." Discussed by Drs. Charles J. White, Boston; William A. Pusey, Chicago; A. Ravogli, Cincinnati; Frank E. Simpson, Chicago; Frank W. Cregor, Indianapolis; Richard L. Sutton, Kansas City, and M. B. Hartzell, Philadelphia.

The following papers were read as a Symposium on the Control of Leprosy:

Dr. W. C. Rucker, Washington, D. C.: "The Necessity for the Establishment of a National Leprosarium."

Dr. Isadore Dyer, New Orleans: "The Attitude of the Government in Leprosy Care and Control."

These two papers were discussed by Drs. Martin F. Engman, St. Louis; William S. Gottheil, New York; Ernest L. McEwen, Chicago; M. L. Ravitch, Louisville; Charles J. White, Boston; Jay F. Schamberg, Philadelphia; M. B. Hartzell, Philadelphia; S. E. Sweitzer, Minneapolis; Gardner T. Swarts, Providence, R. I.; W. C. Rucker, Washington, D. C., and Isadore Dyer, New Orleans.

Dr. Martin F. Engman offered the following motion, which was unanimously adopted: "Moved that a committee of three be appointed from this Section to draft a resolution to be presented to the House of Delegates on the question of urging the U. S. Government to prepare a way for the national control of leprosy and the foundation of a national leper home."

The Chairman announced the following to serve on this committee: Drs. Martin F. Engman, St. Louis; Charles J. White, Boston, and James M. Winfield, Brooklyn.

Dr. M. L. Heidingsfeld, Cincinnati, read a paper on "A New Method of Treatment of Lupus Vulgaris." Discussed by Drs. William T. Corlett, Cleveland; M. L. Ravitch, Louisville; H. C. Baum, Syracuse; William S. Gottheil, New York; S. E. Sweitzer, Minneapolis; Henry H. Hazen, Washington, D. C.; J. B. Shelmire, Dallas; Jay F. Schamberg, Philadelphia; M. B. Hartzell, Philadelphia; J. B. Kessler, Iowa City, Iowa, and M. L. Heidingsfeld, Cincinnati.

Dr. William L. Clark, Philadelphia, read a paper on "The Desiccation Treatment of Congenital and New Growths of the Skin and Mucous Membranes. A Lantern Demonstration." Discussed by Drs. Jay F. Schamberg, Philadelphia; Henry H. Hazen, Washington, D. C.; C. A. Simpson, Washington, D. C.; William H. Schmidt, Atlantic City; Arthur F. Holding, New York, and William L. Clark, Philadelphia.

WEDNESDAY, JUNE 24—MORNING

Dr. Martin F. Engman, St. Louis, presented the following resolutions on leprosy, a motion to make this a special order of business being unanimously adopted:

To the Honorable House of Delegates of the American Medical Association:

The Section on Dermatology of the American Medical Association respectfully submits the following resolutions, which have been unanimously adopted by the Section on June 24, 1914:

WHEREAS, Leprosy exists in many foci in this country, and has been statistically shown to be on the increase; and

WHEREAS, Those affected with leprosy are being subjected to most inhuman treatment; and

WHEREAS, Many lepers are traveling in interstate traffic because of the inhuman treatment to which they are subjected, thereby constantly exposing the general public to the contagion; and

WHEREAS, It is the duty of the federal government to control traffic between the states; and

WHEREAS, At the present time the care of the lepers in the United States is a great economic burden on the individual states and is, moreover, of necessity inadequate from a medical and sanitary standpoint; therefore, be it

Resolved, That the Association recommends the passage by Congress of a law for the comprehensive care and control of leprosy by the federal government.

[This was referred by the House of Delegates to the Reference Committee on Hygiene and Public Health.]

Dr. A. Ravogli, Cincinnati, read a paper entitled "A Few Practical Points on the Treatment of Leg Ulcers." Discussed by Drs. Frank E. Simpson, Chicago; J. B. Kessler, Iowa City, Iowa; M. L. Heidingsfeld, Cincinnati; Martin F. Engman, St. Louis, and A. Ravogli, Cincinnati.

Drs. Frank Crozer Knowles and Leonard D. Frescoln, Philadelphia, presented a paper on "Unusual Types of Diphtheria of the Skin. Report of Two Cases." Discussed by Drs. Henry C. Baum, Syracuse; Martin F. Engman, St. Louis; M. Haase, Memphis; A. Ravogli, Cincinnati; H. N. Cole, Cleveland; Leonard D. Frescoln, Philadelphia, and Frank C. Knowles, Philadelphia.

Prof. G. Arndt, Berlin, presented a paper on "The Diseases and New Growths of the Skin of Lymphatic Origin." Discussed by Drs. H. H. Hazen, Washington, D. C.; J. A.

Fordyce, New York; A. Ravogli, Cincinnati; Martin F. Engman, St. Louis; S. Pollitzer, New York, and Prof. G. Arndt, Berlin.

Drs. Jay F. Schamberg, R. W. Raiziss and John A. Kolmer, Philadelphia, presented a paper entitled "Summary of Research Studies in Psoriasis." Discussed by Drs. William A. Pusey, Chicago; R. W. Raiziss, Philadelphia; John A. Kolmer, Philadelphia; W. S. Gottheil, New York; S. Pollitzer, New York, and Jay F. Schamberg, Philadelphia.

Drs. William S. Gottheil and David I. Satenstein, New York, presented a paper on "Further Experiences with Intravenous Autoserum Injections as an Adjuvant to the Treatment of Inveterate Skin Diseases." Discussed by Drs. Howard Fox, New York; James M. Winfield, Brooklyn; J. A. Fordyce, New York; William T. Corlett, Cleveland; Charles J. White, Boston; M. L. Heidingsfeld, Cincinnati; W. S. Gottheil, New York, and H. N. Cole, Cleveland.

Dr. William H. Best, Brooklyn, presented a paper on "The Use of Salvarsan in Non-Syphilitic Diseases." Discussed by Drs. J. A. Fordyce, New York; James M. Winfield, Brooklyn; Frank W. Cregor, Indianapolis; Howard Fox, New York; William T. Corlett, Cleveland, and William H. Best, Brooklyn.

WEDNESDAY, JUNE 24—AFTERNOON

The following papers were read as a Symposium on Syphilis:

Dr. Charles J. White, Boston: "A Statistical Study of Syphilis. The Relation of Its Symptoms to Subsequent Tabes Dorsalis or General Paralysis."

Dr. H. H. Hazen, Washington, D. C.: "Syphilis in the American Negro."

Dr. Henry J. Nichols, Washington, D. C.; "Observations on the Pathology of Syphilis."

Dr. F. W. Baeslack, Detroit: "A Sero-Enzyme Test for Syphilis."

Dr. John A. Fordyce, New York: "The Treatment of Syphilis of the Nervous System."

Dr. B. C. Corbus, Chicago: "Cerebrospinal Examinations in 'Cured' Syphilis in which the Biologic Method has been Used as a Control."

Drs. Jerome Kingsbury and Paul E. Bechet, New York: "The Intravenous Administration of Mercury in Syphilis."

These seven papers were discussed by Drs. William T. Corlett, Cleveland; S. Pollitzer, New York; C. A. Simpson, Washington, D. C.; A. Ravogli, Cincinnati; Thomas W. Murrell, Richmond, Va.; Claude O. Abernethy, Raleigh, N. C.; H. H. Hazen, Washington, D. C.; Henry J. Nichols, Washington, D. C.; J. A. Fordyce, New York; B. C. Corbus, Chicago, and Paul E. Bechet, New York.

THURSDAY, JUNE 25—MORNING

The following officers were elected for the ensuing year: Chairman, Dr. Howard Fox, New York; Vice-Chairman, Dr. A. Ravogli, Cincinnati; Secretary, Dr. H. H. Hazen, Washington, D. C.; Delegate, Dr. O. H. Foerster, Milwaukee; Alternate, Dr. Ernest D. Chipman, San Francisco.

Prof. G. Arndt, Berlin, was unanimously elected as an honorary member of the Section.

Drs. H. N. Cole and H. O. Ruh, Cleveland, presented a paper on "Pemphigoid in the New-Born (Pemphigus Neonatorum) with Report of an Epidemic." Discussed by Drs. William A. Pusey, Chicago; A. Ravogli, Cincinnati, and H. N. Cole, Cleveland.

Dr. Frank E. Simpson, Chicago, presented a paper on "Radium: Its Use and Limitations in Skin Diseases."

Dr. Arthur F. Holding, New York, presented a paper on "The Relative Value of Radium in Dermatology."

These two papers were discussed by Drs. Isadore Dyer, New Orleans; Henry C. Baum, Syracuse; Fred Wise, New York; Jay F. Schamberg, Philadelphia; William A. Pusey, Chicago; George M. MacKee, New York; Richard L. Sutton, Kansas City, Mo.; Frank E. Simpson, Chicago, and Prof. William Duane, Boston.

Dr. Ludwig Weiss, New York, reported "An Unusual Case of Bromoderma of the Legs." This was discussed by Drs. Ernest L. McEwen, Chicago; A. Ravogli, Cincinnati; M. L. Ravitch, Louisville; George M. MacKee, New York, and Ludwig Weiss, New York.

Drs. George M. MacKee and Fred Wise, New York, presented a paper on "A Case of White-Spot Disease Occurring on the Penis and Scrotum." Discussed by Drs. H. H. Hazen, Washington, D. C.; Frank W. Cregor, Indianapolis, and George M. MacKee, New York.

Dr. S. E. Sweitzer, Minneapolis, presented a paper on "Sarcoid of Boeck." Discussed by Drs. Howard Fox, New York; Frank W. Cregor, Indianapolis, and S. E. Sweitzer, Minneapolis.

Dr. O. H. Foerster, Milwaukee, presented a paper on "Association of Erythema Nodosum and Tuberculosis." Discussed by Drs. Fred Wise, New York; Ernest L. McEwen, Chicago; George M. MacKee, New York; W. C. Brownson, Asheville, N. C.; J. B. Kessler, Iowa City, Ia.; A. Ravogli, Cincinnati; Richard L. Sutton, Kansas City, Mo., and O. H. Foerster, Milwaukee.

The Chairman read a communication from Dr. Craig, the Secretary of the Association, stating that under the new law, the term of service of the Secretary of the Section would be three years, instead of one year, as heretofore.

Adjourned.

SECTION ON PREVENTIVE MEDICINE AND PUBLIC HEALTH

TUESDAY, JUNE 23—AFTERNOON

The Chairman, Dr. M. P. Ravenel, called the meeting to order at 2:34 p. m.

Dr. Ravenel then read his Chairman's address and oration, "The Education of Health Officers." No discussion.

The report of the Committee on Poverty consisted of a symposium of papers by members of the committee, as follows:

Dr. S. C. Knopf, New York: "Tuberculosis as a Cause and Result of Poverty."

Dr. J. N. Hurty, Indianapolis: "Diseases and Poverty."

Dr. Woods Hutchinson, New York, an address on the general theme.

The communications of Drs. Knopf and Hutchinson were discussed by Drs. Edward O. Otis, Boston, and W. A. Evans, Chicago.

Dr. Ernest C. Levy, Richmond, Va., on request of Dr. John F. Anderson, read a resolution, as follows:

WHEREAS, The improvement and control of the milk-supply of the country is one of the most important measures for the protection of the public health, and in order that this improvement may be properly directed and the control intelligently exercised, it is necessary that milk standards be established and classes of milk be defined. Therefore, be it resolved:

1. That the Section on Preventive Medicine and Public Health of the American Medical Association urges the House of Delegates to approve of the establishment of uniform milk standards and the classification of milk such as are embodied in the report of the Commission on Milk Standards appointed by the New York Milk Committee and published in the *Public Health Reports*, Aug. 22, 1913; and

2. That the Section on Preventive Medicine and Public Health of the American Medical Association recommends that the House of Delegates urge the adoption of these standards and classification by municipalities so far as local conditions make that possible.

The resolution, on motion (understood) of its reader, duly seconded, was adopted, and ordered referred to the House of Delegates. [Approved by House of Delegates.]

Dr. R. Q. Lilliard, Chairman, Nashville, Tenn., read the "Report of the Committee on Cerebrospinal Meningitis," which, on motion of Dr. S. C. Knopf, New York, duly seconded, was accepted.

Dr. C. Hampson Jones, Secretary, Baltimore, presented a suggestion for the appointment by the Chairman of a committee of three to draft by-laws for the Section; Dr. J. W. Trask, Washington, D. C., made a motion to that effect, which, being duly seconded, prevailed; in accordance wherewith the Chairman as such committee appointed Drs. J. W. Trask, Washington, D. C.; C. Hampson Jones, Baltimore, and W. A. Evans, Chicago.

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WEDNESDAY, JUNE 24—MORNING

Dr. W. C. Woodward, Washington, D. C., as giving effect to a recommendation in the Chairman's address and oration, offered the following:

Resolved, That the Council on Medical Education be requested to investigate the courses of instruction now leading to the degree of Doctor of Public Health and similar degrees and to outline minimum requirements for such courses.

The resolution was duly seconded and, without discussion, carried. [Referred by the House of Delegates to the Council on Medical Education.]

Dr. J. W. Trask, Washington, D. C., requested Dr. W. C. Woodward, Washington, D. C., to formulate a resolution on morbidity reports. Dr. Woodward accordingly presented the following:

Resolved, That a committee be appointed to represent the American Medical Association in any conferences that may be held or any action that may be taken looking toward the formulation and enactment of laws and regulations providing for the reporting of cases of disease and disability.

Dr. Woodward moved the adoption of the foregoing, which was numerously seconded by Dr. Trask and others, and, there being no discussion, the motion prevailed. [Referred by the House of Delegates to the Council on Health and Public Instruction.]

Dr. M. Clayton Thrush, Philadelphia, read a paper on "The Importance of Proper Sanitary Measures in the Preparation of Foodstuffs." Discussed by Drs. J. W. Trask, Washington, D. C.; G. E. Robbins, Chillicothe, Ohio; N. E. Campbell, Chicago; John L. Burkart, Lansing, Mich.; Harold B. Wood, Providence, R. I.; Charles J. Hastings, Toronto; M. P. Ravenel, Madison, Wis.; John W. S. McCullough, Toronto, and M. Clayton Thrush, Philadelphia.

The Chairman announced as his appointees for the Committee on Nominations, Drs. W. A. Evans, Chicago; W. S. Rankin, Raleigh, N. C., and J. W. Kerr, Washington, D. C.

Dr. John S. Fulton, Baltimore, read a paper on "Criticism of an Attempt to Prove that a Public-Health Laboratory May Distribute Infection." Discussed by Drs. Seneca Egbert, Philadelphia; W. S. Rankin, Raleigh, N. C.; Charles J. Hastings, Toronto; E. R. Kelley, Seattle, Wash.; Martin Friedrich, Cleveland; G. B. Young, Chicago; Ernest C. Levy, Richmond, Va.; I. D. Rawlings, Chicago; J. W. Trask, Washington, D. C., and John S. Fulton, Baltimore.

Dr. N. E. Campbell, Chicago, read a paper on "Some Important Phases of Railway Sanitation." Discussed by Drs. A. M. Harvey, Chicago; J. W. Kerr, Washington, D. C.; John W. S. McCullough, Toronto; G. H. Sumner, Des Moines, Iowa; W. H. Sanders, Montgomery, Ala.; Charles C. Browning, Los Angeles; W. C. Rucker, Washington, D. C.; Charles J. Hastings, Toronto; M. P. Ravenel, Madison, Wis.; Eugene R. Kelley, Seattle, Wash., and N. E. Campbell, Chicago.

Dr. J. W. Trask, Washington, D. C., presented the following:

Resolved, That the Chairman of the Section on Preventive Medicine and Public Health appoint a committee to study and report on the health organization of counties and related geographical units with especial reference to the appointment of full-time and properly qualified health officials.

The proposed resolution was seconded by Dr. J. N. Hurty, Indianapolis; modified by the mover, at the suggestion of a verbal change by Dr. W. S. Rankin, Raleigh, N. C., to read "establishment" instead of "appointment"; discussed by Drs. W. S. Rankin, Raleigh, N. C.; J. W. Kerr, Washington, D. C.; J. E. Ferrell, Washington, D. C.; M. P. Ravenel, Madison, Wis.; J. W. Trask, Washington, D. C., and W. H. Sanders, Montgomery, Ala., and adopted. [The general subject is already under consideration by the Council on Health and Public Instruction. Resolution was not referred to the House of Delegates.]

Dr. J. N. Hurty, Indianapolis, made a motion, duly seconded, that the Section on Preventive Medicine and Public Health appoint a committee to investigate the question of the representation of the Section in the Scientific Exhibit at the annual meeting of the American Medical Association, which motion was adopted, and the membership of the committee fixed at three.

WEDNESDAY, JUNE 24—AFTERNOON

The following papers were read as a Symposium on Tuberculosis:

Dr. Albert P. Francine, Philadelphia: "Principles of State Control of Tuberculosis, with Special Reference to Pennsylvania's System."

Dr. C. Am Ende, New York: "Enemies of the Consumptive."

Dr. Mary E. Lapham, Highlands, N. C.: "The Prevention of Tuberculosis by Periodic Examinations of Schoolchildren."

These three papers were discussed by Drs. Edward O. Otis, Boston; S. C. Knopf, New York; Charles C. Browning, Los Angeles; Theodore B. Sachs, Chicago; W. H. Sanders, Montgomery, Ala.; Adolph Koenig, Pittsburgh; Charles J. Hastings, Toronto; Mr. E. R. Smith, Clark School, Baltimore; Drs. Guy L. Kiefer, Detroit; John Ritter, Chicago; Davis Furman, Greenville, S. C.; Albert P. Francine, Philadelphia; C. Am Ende, New York; Mary E. Lapham, Highlands, N. C., and M. P. Ravenel, Madison, Wis.

Dr. S. C. Knopf, New York, offered a resolution on the question of health insurance, seconded by Dr. Edward O. Otis, Boston, and discussed by Drs. C. Am Ende, New York; J. W. Trask, Washington, D. C., and Louis I. Dublin, New York; whereupon Dr. W. A. Evans, Chicago, offered, as a substitute, the following, left in his hands by Dr. Woods Hutchinson, New York:

That in view of the problems likely to be forced on us by legislative action on state medical insurance, this Section appoint a committee of five to collect data on the results of such legislation in England, Germany and elsewhere, study the applicability of this System of Health Insurance to private practice, and work out a scheme of circumstances under which and fees for which medical service by annual contract can be carried with advantage and profit to both the community and the profession, such committee to report to next annual session of this Section for full discussion.

Dr. Knopf and the seconder of his motion accepting the foregoing substitute motion, presented by Dr. Evans, and the latter being duly seconded, it was discussed by Dr. John Ritter, Chicago, and adopted, with the understanding that the Chair appoint such committee.

Dr. Francis E. Fronczak, Buffalo, N. Y., read a paper on "Present-Day Public-Health Activities."

Dr. Ernest C. Levy, Richmond, Va., read a paper on "Infantile Dejecta an Unrecognized Source of Infection."

These two papers were discussed by Drs. Woods Hutchinson, New York; W. W. Tompkins, Charleston, W. Va.; W. A. Evans, Chicago; J. W. Trask, Washington, D. C.; W. S. Rankin, Raleigh, N. C.; M. P. Ravenel, Madison, Wis.; C. Am Ende, New York; C. Hampson Jones, Baltimore; Charles J. Hastings, Toronto; Davis Furman, Greenville, S. C.; John S. Fulton, Baltimore; Francis E. Fronczak, Buffalo, and Ernest C. Levy, Richmond, Va.

THURSDAY, JUNE 25—MORNING.

The Committee on Nominations reported the following Nominations: Chairman, Dr. C. Hampson Jones, Baltimore; Vice-Chairman, Dr. E. R. Kelley, Seattle, Wash.; Secretary, Dr. O. P. Geier, Cincinnati; Delegate, Dr. Morgan Smith, Little Rock.

Dr. Francis E. Fronczak, Buffalo, moved the adoption of the report of the Committee on Nominations as read; the motion prevailed, and the Chairman declared the nominees elected.

The Chairman then announced his appointments for the following: 1. Committee on Railroad Sanitation: Drs. A. Clark, Hunt, Metuchen, N. J.; N. E. Campbell, Chicago; W. C. Rucker, Washington, D. C.; E. R. Kelley, Seattle, Wash., and S. J. Crumbine, Topeka, Kan. 2. Committee on Poverty: Drs. Woods Hutchinson, S. C. Knopf, Mr. Frederick L. Hoffman and Drs. Guy L. Kiefer and J. W. Trask. 3. Committee on Scientific Exhibit: Drs. Ernest C. Levy, William C. Woodward, W. S. Rankin, R. Q. Lillard and Charles C. Browning.

The retiring Chairman, Dr. M. P. Ravenel, then turned the meeting over to Chairman-Elect Dr. C. Hampson Jones, who, responding to calls for a speech, in felicitous terms acknowledged his sense of the honor conferred and besought the active cooperation of the membership in the serious work of this important Section.

Dr. Myer Solis-Cohen, Philadelphia, read a paper on "School Spread of Contagious Diseases and How to Control It." Discussed by Drs. Ernest C. Levy, Richmond, Va.; Harold B. Wood, Providence, R. I.; C. B. Wood, Monongahela, Pa.; S. L. Jepson, Wheeling, W. Va.; Francis E. Fronczak, Buffalo; I. D. Rawlings, Chicago, and Myer Solis-Cohen, Philadelphia.

Dr. John W. Trask, Washington, D. C., read a paper on "The Provisions of the Model State Law for the Notification of Controllable Diseases." Discussed by Drs. A. T. McCormack, Bowling Green, Ky.; Tom A. Williams, Washington, D. C.; S. L. Jepson, Wheeling, W. Va.; Martin Freidrich, Cleveland; I. D. Rawlings, Chicago; Charles J. Hastings, Toronto, and John W. Trask, Washington, D. C.

Dr. W. H. Price, Detroit, read a paper on "A Year's Experience with Public-Health Contagious-Disease Nurses." No discussion.

Louis I. Dublin, Ph.D., New York, read a paper on "County Health-Organization in the United States." Discussed by Drs. William M. Perkins, New Orleans; W. H. Sanders, Montgomery, Ala.; W. S. Rankin, Raleigh, N. C.; John W. Trask, Washington, D. C.; S. C. Knopf, New York; A. T. McCormack, Bowling Green, Ky., and Louis I. Dublin, Ph.D., New York.

THURSDAY, JUNE 25—AFTERNOON

A joint meeting was held with the Section on Pharmacology and Therapeutics.

The following papers were read as a Symposium on Pellagra:

Drs. J. F. Siler and P. E. Garrison, Washington, D. C., and W. J. MacNeal, New York: "The Work of the Thompson-McFadden Pellagra Commission."

Drs. Edward Francis, C. H. Lavinder, R. M. Grimm and W. F. Lorenz, Washington, D. C.: "Attempts to Transmit Pellagra to Monkeys."

Dr. Carl Voegtlin, Washington, D. C.: "Treatment of Pellagra."

These three papers were discussed by Drs. Marcus Haase, Memphis, Tenn.; R. Q. Lillard, Nashville, Tenn.; W. C. Brownson, Asheville, N. C.; W. T. Shell, Corsicana, Tex.; John L. Jelks, Memphis, Tenn.; Robert Wilson, Charleston, S. C.; Ward J. MacNeal, New York; Claude Smith, Atlanta, Ga.; J. F. Siler, Washington, D. C.; John Ritter, Chicago; Edward Francis, Washington, D. C., and Carl Voegtlin, Washington, D. C.

Dr. C. J. Hunt, Harrisburg, Pa., read (in abstract) a paper entitled "Certain Problems in Infant Mortality." No discussion.

SECTION ON GENITO-URINARY DISEASES

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order at 2:20 p. m., the chairman, Dr. Arthur L. Chute, Boston, presiding.

The chairman stated that neither the delegate to the House of Delegates nor the alternate was present, and that it would be necessary to elect a delegate. Thereupon Dr. W. M. Spitzer, Denver, was elected delegate to the House of Delegates.

Dr. J. Dellinger Barney, Boston, read a paper on "The Ultimate Results of Genital Tuberculosis in the Male." Discussed by Drs. B. C. Corbus, Chicago; R. H. Herbst, Chicago; J. H. Cunningham, Jr., Boston; Edward L. Keyes, Jr., New York, and J. Dellinger Barney, Boston.

Dr. W. F. Martin, Battle Creek, Mich., read a paper on "The Value of Hydrotherapy in Urologic Cases." Discussed by Drs. D. Miller Barr, Atlantic City, and W. F. Martin, Battle Creek.

Dr. Alexander Randall, Philadelphia, read a paper on the "Endoscopic Treatment of Nocturnal Emissions."

Dr. A. G. Rytina, Baltimore, read a paper on "The Radical Removal of Certain Types of Diseased Verumontanum with Notes on Their Pathology."

These two papers were discussed by Drs. H. L. Leiter, Syracuse, N. Y.; J. D. Barney, Boston; F. W. Robbins, Detroit; H. L. Kretschmer, Chicago; Louis E. Schmidt, Chicago; E. L. Keyes, Jr., New York; John A. Hawkins, Pittsburgh; Frederick Charlton, Indianapolis; R. H. Herbst, Chicago; Alexander Randall, Philadelphia, and A. G. Rytina, Baltimore.

Dr. E. L. Keyes, Jr., New York, read a paper on "A Method of Controlling Hemorrhage after Suprapubic Removal of the Hypertrophied Prostate." Discussed by Drs. F. R. Hagner, Washington, D. C.; C. E. Barnett, Fort Wayne, and E. L. Keyes, Jr., New York.

The chairman called attention to the fact that it was necessary for members desiring the *Transactions* of the Section to subscribe for them. He asked that each member subscribe for two copies, so that as heretofore one hundred copies could be sent to journals, libraries and prominent men abroad.

WEDNESDAY, JUNE 24—MORNING

Dr. R. H. Herbst, Chicago, read a paper on "The Treatment of Hydrocele with Special Reference to Phenol Injections." Discussed by Drs. A. A. Martin, New Zealand; V. D. Lespinasse, Chicago; B. A. Thomas, Philadelphia; Frank Hinman, Baltimore, and R. H. Herbst, Chicago.

Dr. V. D. Lespinasse, Chicago, read a paper on "Permanent Epididymotomy." Discussed by Drs. Henry L. Sanford, Cleveland; W. M. Spitzer, Denver; H. L. Kretschmer, Chicago; Edward Martin, Philadelphia, and V. D. Lespinasse, Chicago.

Dr. Frank Hinman, Baltimore, read a paper on "Malignant Disease of the Testes and Its Operative Treatment." Discussed by Drs. Hugh H. Young, Baltimore; F. W. Robbins, Detroit; E. L. Keyes, Jr., New York; Martin Krotoszyner, San Francisco, and Frank Hinman, Baltimore.

The chairman announced the appointment of Drs. Hugh H. Young, Baltimore; E. L. Keyes, Jr., New York, and A. C. Stokes, Omaha, as members of the Nominating Committee.

Dr. B. A. Thomas, Philadelphia, read a paper on "The Rôle of Functional Kidney Tests and the Preoperative and Postoperative Treatment in the Reduction of Prostatectomy Mortality." Discussed by Drs. Hugh H. Young, Baltimore; Edward Martin, Philadelphia; M. Krotoszyner, San Francisco; Hugh Cabot, Boston; W. F. Braasch, Rochester, Minn., and B. A. Thomas, Philadelphia.

Dr. Charles E. Barnett, Fort Wayne, read a paper on "Suprapubic Prostatectomy." No discussion.

Dr. William M. Spitzer, Denver, read a paper on "Continuous Painless Renal Hemorrhage and Its Treatment." Discussed by Drs. H. L. Kretschmer, Chicago; W. F. Braasch, Rochester, Minn.; Hugh Cabot, Boston; J. W. Squires, Charlotte, N. C., and W. M. Spitzer, Denver.

Dr. I. S. Koll, Chicago, read a paper on "A Study of the Action of the Colon Bacillus on the Kidney." Discussed by Drs. J. Bentley Squier, New York; Louis E. Schmidt, Chicago; H. W. Plaggemeyer, Detroit; A. J. Krowell, Charlotte, N. C., and I. S. Koll, Chicago.

WEDNESDAY, JUNE 24—AFTERNOON

Dr. J. Bentley Squier, New York, read a paper on "Surgery of the Bladder."

Dr. Arthur L. Chute, Boston, delivered the Chairman's Address, "A Plea for a More Extensive Operation in Cancer of the Bladder."

These two papers were discussed by Drs. Eugene Fuller, New York; John L. Atlee, Lancaster, Pa.; F. R. Hagner, Washington, D. C.; R. L. Rigdon, San Francisco; B. A. Thomas, Philadelphia; L. E. Schmidt, Chicago; Granville MacGowan, Los Angeles; William E. Lower, Cleveland; Martin Krotoszyner, San Francisco; J. B. Squier, New York, and A. L. Chute, Boston.

Dr. Eugene Fuller, New York, read a paper on "Extraperitoneal Rupture of the Bladder: Its Surgical Management." Discussed by Drs. A. G. Rytina, Baltimore; D. N. Eisendrath, Chicago, and Eugene Fuller, New York.

Dr. William E. Lower, Cleveland, read a paper on "Diverticula of the Urinary Bladder with Report of Cases." Discussed by Drs. Martin Krotoszyner, San Francisco; George G. Smith, Boston, and William E. Lower, Cleveland.

Dr. D. N. Eisendrath, Chicago, read a paper on the "Influence of Collargol Injections on the Kidney." Discussed by

Drs. W. F. Braasch, Rochester, Minn.; A. J. Crowell, Charlotte, N. C.; F. R. Hagner, Washington, D. C.; H. D. Furniss, New York; Martin Krotoszyner, San Francisco, and Frederick Charlton, Indianapolis.

Dr. William H. Barber, New York, read a paper on "Renal Infection; a Further Experimental Study of Its Relations to Impaired Ureteric Function." Discussed by Drs. J. W. Draper, New York; W. F. Braasch, Rochester, Minn.; J. H. Cunningham, Jr., Boston; D. N. Eisendrath, Chicago, and W. H. Barber, New York.

Dr. George G. Smith, Boston, read a paper on "Observations on Renal Function Determined by Ureteral Catheterization and Pheno'sulphonephthalein Test." Discussed by Drs. B. A. Thomas, Philadelphia; M. H. Wyman, Baltimore; William E. Stevens, San Francisco, and G. G. Smith, Boston.

THURSDAY, JUNE 25—MORNING

The following officers were elected for the ensuing year: Chairman, Dr. Granville MacGowan, Los Angeles; Vice-Chairman, Edward L. Martin, Philadelphia; Secretary, Louis E. Schmidt, Chicago; Delegate, F. M. McCallum, Kansas City; Alternate, John T. Geraghty, Baltimore.

Dr. Martin Krotoszyner, San Francisco, read a paper on "The Differential Diagnosis of Nephrolithiasis and Renal Tuberculosis by Roentgenography." Discussed by Drs. W. M. Spitzer, Denver, and M. Krotoszyner, San Francisco.

Dr. John Geraghty, Baltimore, read a paper on "The Treatment of Pyelitis." Discussed by Drs. I. S. Koll, Chicago; M. Krotoszyner, San Francisco; Louis E. Schmidt, Chicago; William E. Stevens, San Francisco, and John Geraghty, Baltimore.

Drs. W. F. Braasch and G. J. Thomas, Rochester, Minn., read a paper on "The Value of Renal Functional Tests in Surgical Conditions of the Urinary Tract." Discussed by Drs. John Geraghty, Baltimore; B. A. Thomas, Philadelphia; G. G. Smith, Boston; William E. Stevens, San Francisco, and W. F. Braasch, Rochester, Minn.

Dr. Louis E. Schmidt, Chicago, read a paper on "Surgical Interference in Nephritis."

Dr. John H. Cunningham, Jr., Boston, read a paper on "Acute Unilateral Infection of the Kidney."

Dr. Granville MacGowan, Los Angeles, read a paper on "Hemic Infection of the Kidney."

These three papers were discussed by Drs. Hugh Cabot, Boston; B. C. Corbus, Chicago; Martin Krotoszyner, San Francisco; Louis E. Schmidt, Chicago; J. H. Cunningham, Jr., Boston, and Granville MacGowan, Los Angeles.

SECTION ON HOSPITALS

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order shortly after 2 p. m. by the Chairman, Dr. L. B. Baldwin, Minneapolis.

Dr. Baldwin then read the Chairman's address.

The following papers were read as a Symposium on Hospital Care of Communicable Diseases:

Dr. Robert J. Wilson, New York City: "The Care of Communicable Diseases in General Hospitals."

Dr. D. L. Richardson, Providence, R. I.: "The Prevention of Communicable Diseases in General Hospitals."

These two papers were discussed by Drs. Bracken, Cook, Walsh, Collins, Keefer, Hubbard, Sedgwick, Hornsby, R. J. Wilson, New York, and D. L. Richardson, Providence, R. I.

WEDNESDAY, JUNE 24—MORNING

The Section on Hospitals was called to order shortly after 9 a. m. by the Chairman, Dr. Baldwin.

Dr. Walter L. Bierring, Des Moines, Iowa, read a paper on "Physical Therapy in Its Relation to the Hospital Patient from the Point of View of the Internist."

Dr. C. Hermann Bucholz, Boston, read a paper, entitled "Six Years' Experience in the Medicomechanical Department of the Massachusetts General Hospital."

The two papers were discussed by Drs. A. B. Hirsh, Philadelphia, and C. H. Bucholz, Boston.

Dr. Joseph D. Farrar presented the report of the Committee on Hospital Abuses of Charity.

Discussed by Drs. Hornsby, Walsh, Bauer, Hirsh, Wilson and Farrar.

On motion the report was accepted and placed on file.

THURSDAY, JUNE 25—MORNING

The following officers were elected for the ensuing year: Chairman, Dr. Winford H. Smith, Baltimore; Secretary, Dr. John A. Hornsby, Chicago; Delegrate, Dr. F. A. Washburn, Boston; Alternate, Dr. J. B. Howland, Boston.

The following papers were read as a Symposium on Air Problems in Hospitals:

Mr. F. H. Bass, Minneapolis: "Tests of Ventilating Plants."

Mr. C. E. A. Winslow, New York: "The Importance of Studying the Actual Condition of Hospital Air."

Dr. James Alexander Miller, New York: "Ventilation from the Point of View of the Clinician."

Mr. F. H. Lee, New York: "Laboratory Experiments with Air."

Mr. Arthur K. Ohmes, New York: "Possibilities of Mechanical Ventilation."

Mr. T. J. Van der Bent, New York: "Comparisons of Old and New Hospitals."

These six papers were discussed by Drs. Hollings, Cook, Bracken, Shallon, Hornsby and Miller, and Messrs. Edward F. Stevens, C. E. A. Winslow, Arthur V. Ohmes and T. J. Van der Bent.

THURSDAY, JUNE 25—AFTERNOON

A joint meeting was held with the Section on Surgery. For a report of the proceedings, see minutes of that section.

SECTION ON ORTHOPEDIC SURGERY

TUESDAY, JUNE 23—AFTERNOON

The meeting was called to order at 2:45 p. m. by the Chairman, Dr. Leonard W. Ely, San Francisco.

Dr. Ely then delivered the Chairman's address entitled, "Orthopedic Surgery; Its Scope and Its Future." No discussion.

Mr. John Fraser, Edinburgh, read a paper entitled, "Some Remarks on the Etiology and Pathology of Bone and Joint Tuberculosis." Discussed by Drs. J. P. Lord, Omaha; Nathaniel Allison, St. Louis; A. H. Freiberg, Cincinnati; F. H. Albee, New York; Arthur Steindler, Des Moines, Iowa; J. D. Griffith, Kansas City, Mo., and John Fraser, Edinburgh.

A vote of thanks was given to Mr. Fraser, together with an amendment that he be recommended for election to honorary fellowship.

Dr. Edward W. Ryerson, Chicago, read a paper on "Recurrent Spondylolisthesis with Paralysis. Bone Splint Transplantation; Recovery." Discussed by Drs. F. H. Albee, New York; Charles A. Parker, Chicago; J. T. Rugh, Philadelphia; J. A. Nutter, Montreal, Canada, and E. W. Ryerson, Chicago.

Dr. Nathaniel Allison, St. Louis, read a paper on "Ankylosis; An Experimental Study." Discussed by Drs. Barney Brooks, St. Louis; J. T. Rugh, Philadelphia, and W. S. Baer, Baltimore.

Dr. W. S. Baer, Baltimore, read a paper on "Arthroplasty with the Aid of Animal Membrane." Discussed by Drs. E. W. Ryerson, Chicago; N. Allison, St. Louis; A. H. Freiberg, Cincinnati; G. G. Davis, Philadelphia; Frederick Hodgson, Atlanta, Ga., and W. S. Baer, Baltimore.

Dr. W. Russell MacAusland, Boston, read a paper on "Arthroplasty of the Elbow-Joint." Discussed by Drs. G. G. Davis, Philadelphia; C. A. Parker, Chicago, and W. R. MacAusland, Boston.

WEDNESDAY, JUNE 24—MORNING

Dr. F. J. Cotton, Boston, presented a paper on "A Neglected Form of Ankle Fracture." Discussed by Drs. J. D. Griffith, Kansas City, Mo.; G. G. Davis, Philadelphia; H. W. Orr,

Lincoln, Neb.; J. P. Lord, Omaha; W. R. MacAusland, Boston; F. E. Peckham, Providence, R. I.; D. B. Phemister, Chicago, and F. J. Cotton, Boston.

Dr. W. G. Stern, Cleveland, read a paper on "The Three Cardinal Signs in the Diagnosis of Fractures into or near Joints." Discussed by Drs. F. J. Cotton, Boston; F. E. Peckham, Providence, R. I., and W. G. Stern, Cleveland.

Dr. Frank E. Peckham, Providence, R. I., presented a paper entitled, "The Treatment of Fractures of Both Bones of the Legs." Discussed by Drs. H. W. Orr, Lincoln, Neb.; F. H. Albee, New York; S. C. Baldwin, Salt Lake City; John Ridlon, Chicago; J. D. Griffith, Kansas City, Mo.; F. J. Cotton, Boston, and Frank E. Peckham, Providence, R. I.

Dr. D. B. Phemister, Chicago, presented a paper on "Necrotic Bone and the Subsequent Changes which it Undergoes." Discussed by Drs. F. H. Albee, New York; C. A. Parker, Chicago; Henry W. Frauenthal, New York, and D. B. Phemister, Chicago.

Dr. M. S. Henderson, Rochester, Minn., read a paper on "Resection of the Knee for Tuberculosis." Discussed by Drs. E. D. Oppenheimer, New York; W. C. Campbell, Memphis, Tenn.; John Ridlon, Chicago; R. A. Hibbs, New York; Fred J. Gaenslen, Milwaukee; F. H. Albee, New York; John Dunlop, Washington, D. C.; H. W. Orr, Lincoln, Neb.; Emil S. Geist, Minneapolis; Samuel F. Jones, Denver; L. W. Ely, San Francisco; J. D. Griffith, Kansas City, Mo.; A. H. Freiburg, Cincinnati, and M. S. Henderson, Rochester, Minn.

Dr. John Ridlon, Chicago, read a paper on "Coxa Vara."

WEDNESDAY, JUNE 24—AFTERNOON

Dr. Arthur Steindler, Des Moines, Iowa, read a paper on "Coxa Vara Adolescentium."

The papers of Drs. Ridlon and Steindler were discussed by Drs. Wallace Blanchard, Chicago; W. C. Campbell, Memphis, Tenn.; J. D. Griffith, Kansas City, Mo.; Reginald H. Sayre, New York; G. G. Davis, Philadelphia; E. S. Geist, Minneapolis; John Ridlon, Chicago, and Arthur Steindler, Des Moines, Iowa.

Dr. Z. B. Adams, Boston, presented a paper entitled, "The Relation of Bony Ankylosis of the Lumbar and Sacral Spine to the Cause and Treatment of Scoliosis." Discussed by Drs. Harry Hudson, Philadelphia; John Dunlop, Washington, D. C., and Z. B. Adams, Boston.

Dr. E. G. Abbott, Portland, Me., read a paper on "Scoliosis." Discussed by Drs. Paul A. McIlhenny, New Orleans; R. O. Meisenbach, Buffalo; H. W. Frauenthal, New York; H. W. Orr, Lincoln, Neb.; C. A. Parker, Chicago, and James K. Young, Philadelphia.

Dr. H. B. Thomas, Chicago, read a paper on "Congenital Scoliosis with Specimen Including the Thorax." Discussed by Drs. R. O. Meisenbach, Buffalo, and R. H. Sayre, New York.

Drs. Michael Hoke and Frederick Hodgson, Atlanta, Ga., presented a paper entitled, "Bone and Joint Cases, with Lantern-Slide and Moving-Picture Illustrations." Discussed by Drs. C. A. Parker, Chicago; H. W. Frauenthal, New York, and Frederick Hodgson, Atlanta, Ga.

Dr. Archer O'Reilly, St. Louis, read a paper on "Spondylitic Arthritis; the Question of Diagnosis."

Dr. Henry W. Frauenthal, New York, read a paper on "Syphilitic Bone and Joint Conditions."

These two papers were discussed by Drs. J. D. Griffith, Kansas City, Mo.; James Patterson, Chicago; J. A. Nutter, Montreal; E. D. Oppenheimer, New York; R. O. Meisenbach, Buffalo; A. O'Reilly, St. Louis, and H. W. Frauenthal, New York.

THURSDAY, JUNE 25—MORNING

The following officers were elected: Chairman, Dr. Nathaniel Allison, St. Louis; Vice-Chairman, Dr. R. A. Hibbs, New York; Secretary, Dr. Emil S. Geist, Minneapolis; Delegate, Dr. John Ridlon, Chicago, and Alternate, Dr. Leonard W. Ely, San Francisco.

The following resolution, offered by Dr. Orr of Lincoln, Neb., was adopted:

Resolved, That a committee of three be appointed by the Chair to investigate and report to this Section on the efficiency of the various therapeutic methods, surgical and mechanical, now employed in the treatment of tuberculosis of the joints.

A motion was passed that at least one hundred copies of the Transactions of the Section be ordered.

The following papers were read as a symposium:

Dr. B. P. Farrell, New York: "Hibbs' Osteoplastic Operation for Pott's Disease of the Spine: Results of Clinical Observation and Animal Experimentation."

Dr. Fred H. Albee, New York: "Original Use of the Bone-Graft in Pott's Disease, Fractures and Other Conditions."

Dr. John F. Golden, Chicago: "Use of Transplant from the Tibia as a Unit of a Joint."

Dr. Charles M. Jacobs, Chicago: "Observations of Bone Transplantation (Albee's Method) for the Cure of Pott's Disease."

These four papers were discussed by Drs. W. G. Stern, Cleveland; John B. Murphy, Chicago; Dean Lewis, Chicago; Joel E. Goldthwait, Boston; M. S. Henderson, Rochester, Minn.; F. H. Albee, New York, and J. F. Golden, Chicago.

Dr. Robert B. Osgood, Boston, read a paper on "The Relation of Posture and Intestinal Derangements to Coxitis." Discussed by Drs. J. E. Goldtwait, Boston; A. O'Reilly, St. Louis (or Compton Reilly, Baltimore?); C. A. Parker, Chicago; Frederick Hodgson, Atlanta, Ga.; W. G. Stern, Cleveland; R. O. Meisenbach, Buffalo, and R. B. Osgood, Boston.

Dr. F. W. Nathan, New York City, presented a paper on "Mechanics and Pathology of the Hip in Their Relation to the Diagnosis and Treatment of Diseases of the Hip-Joint." Discussed by Drs. R. A. Hibbs, New York; F. H. Albee, New York; Reilly; Wallace Blanchard, Chicago; W. G. Stern, Cleveland; J. E. Goldthwait, Boston; L. W. Ely, San Francisco, and F. W. Nathan, New York.

THE REGISTRATION AT ATLANTIC CITY

The total registration at the Atlantic City Session was 3,958, an increase of 360 over the number of registrations there in 1912 (1912 registrations, 3,598).

REGISTRATION BY SECTIONS

Practice of Medicine	1,031
Surgery	977
Obstetrics, Gynecology and Abdominal Surgery	309
Ophthalmology	352
Laryngology, Otology, Rhinology	211
Diseases of Children	142
Pharmacology and Therapeutics	24
Pathology and Physiology	113
Stomatology	68
Nervous and Mental Diseases	150
Dermatology	87
Preventive Medicine and Public Health	153
Genito-Urinary Diseases	117
Hospitals	24
Orthopedic Surgery	86
Registrations without specifying any one section	84
Foreign guests and others who registered	30

Notice on Section Transactions

Those who desire copies of the 1914 Transactions of any of the sections, but whose names are not on the permanent subscription list, should order at once, as printing will soon commence. The editions of each of these section transactions is limited. Only enough copies are printed to supply the probable demand, and each year some persons order too late to be supplied. Each volume is a cloth-bound book containing the articles and discussions in that particular section. The price, when ordered in advance, is $1 a volume, payable at time of delivery.

It is to be remembered that one may give a permanent order for Transactions; and those specified are sent, from year to year, until the order is canceled. Address orders to the American Medical Association, 535 North Dearborn Street, Chicago

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Society Proceedings

AMERICAN PEDIATRIC SOCIETY

Twenty-Sixth Annual Meeting held in Stockbridge, Mass., May 26-28, 1914

(*Concluded from page 55*)

Recurrent Vomiting in Private Practice

DR. CHARLES GILMORE KERLEY, New York: Of 141 cases, 70 were boys and 71 girls. The average time the cases were followed was 104 weeks. The diagnosis was based on definite periodic attacks of vomiting. The family history showed that in one or both parents there was rheumatism in 40, and sick headaches and bilious attacks in 40. The condition occurred in the vast majority of cases in the offspring of those who for two or more generations had not been doing manual labor, having usually business or professional occupations. In 31 per cent. of the cases the appetite was good, in 69 per cent. poor. In 59.5 per cent. there was constipation. In 83 the average hemoglobin was 63.5 per cent. and the red blood-cells were 4,280,000. Sixty-nine of the cases had been difficult feeders. Recurrent colds had been present in 41 per cent. In 12 there was a definite history of eczema, 6 had a habit tic, 14 either had or gave a history of having had enuresis, and 13 had had rheumatism. The presence of acetone in the urine was noted in the later attacks with very few exceptions. The onset of the vomiting occurred in 37 cases in the first year, in 24 in the second, and in 21 during the third year of life; in the remainder of the series it occurred from the third to the ninth year. The duration of the interval between the attacks varied greatly, as did the severity of the attacks. There was a rise of temperature during the attacks in 90 per cent. A few cases ran very high temperatures, but the majority of the cases showed a temperature of from 100 to 102 F. In the majority the recurrent vomiting was controlled; in 9 there was an improvement and in 16 no apparent improvement. In some which were not cured the treatment was carried out indifferently.

The association of recurrent vomiting with recurrent bronchitis and other forms of illness is interesting. Sometimes the conditions occurred simultaneously and at other times they were interchangeable. Two brothers were of particular interest in that they had attacks simultaneously, beginning with tonsillitis, followed by bronchitis and asthma, and ending with recurrent vomiting, lasting for a day or two.

The dietetic management is the same, in the main, in all cases. Cow's milk, butter and sugar are omitted from the diet. One egg is allowed perhaps every third day. Saccharin is permitted as a sweetening agent. Three meals a day are allowed but nothing between meals. Red meat is given scantily three times a week, poultry and fish at other times. In some instances skimmed milk is permitted but never more than one pint daily. The further treatment consists of the internal use of salicylate of soda, bicarbonate of soda, independent or in combinations as devised by Rachford. This drug treatment is carried on for periods of months or years as the case may require. Daily physical exercise is a very important factor. A warm bath and a rub at night is also given and in recalcitrant cases physical therapeutics have proved very effective. The nervous element in these cases is not to be forgotten. The precipitation of an attack by fatigue or fright is not unusual. During the acute vomiting attacks a weak solution of bicarbonate of soda is best retained in the strength of 5 grains of bicarbonate of soda to 8 ounces of hot water. As a laxative the magnesium preparations are best. When the vomiting has continued for from twenty-four to thirty-six hours colonic flushings with bicarbonate of soda, 2 drams to 8 ounces, at six- or eight-hour intervals are given. Nothing is gained by attempts at forced feeding.

DISCUSSION

DR. IRVING M. SNOW, Buffalo, N. Y.: In a case that came under my observation in a child with recurrent vomiting and profuse gastric hemorrhages, it was found that there was a hyperacidity, believed to be due to duodenal ulcer with delayed motility. The child was given cream, butter and bacon and also strong alkalies, and made a complete recovery.

DR. CHARLES HUNTER DUNN, Boston: In a similar series of cases seen in private practice and in association with Dr. Rotch the relation to acid intoxication interested me. There seem to be two types of cases. Some seem to be cases of true acid intoxication as Dr. Kerley has described them and another class of cases in which large doses of bicarbonate of soda does not give the slightest benefit. Two cases in which there was fatal hemorrhage made such an impression on me that I have given up the use of bicarbonate of soda. The presence of acetone in the urine is a symptom only.

DR. ALFRED FRIEDLANDER, Cincinnati: Fischer and others who used the alkaline treatment in severe cases are now using a solution of dextrose (20 grams) and sodium chlorid (14 grams) to the liter by rectum. The results thus far are surprisingly good; the profound exhaustion has not appeared and the patients have rallied more promptly. It is too soon to make definite statements about this treatment, but I think it ought to go on record because of the excellent results claimed for it.

DR. ISAAC A. ABT, Chicago: The diet during the interval has no effect on the recurrence of the attacks, they occur about so often no matter what food is taken, neither does the mode of life make any apparent difference, except that a nervous attack or a mild infection may bring on an attack. Eight per cent. glucose in normal salt solution per rectum has been recommended. I have found that bicarbonate and ice-cold chloroform water repeated frequently give relief.

DR. J. P. CROZER GRIFFITH, Philadelphia: Years ago I came to the conclusion that there were cases of recurrent vomiting that could be benefited by bicarbonate and others that could not. Even the giving of bicarbonate between the attacks has no effect. "Recurrent" in connection with these cases does not mean recurring at specific times. In my experience some patients have been benefited by an alteration in the diet while others have not. During the attack I have found nothing as good as a hypodermic injection of morphin. The objection to this is that it stops elimination; that may be, but it sometimes saves life.

DR. HENRY HEIMAN, New York: Cyclic vomiting is a metabolic disturbance of fats as well as of proteids producing acetone bodies. The acidosis is not fatal, but I have seen a case result in eclampsia with a temperature of 108 F. in which no treatment could save the child. The moderate cases respond to bicarbonate of soda in peppermint, the latter acting as a mild local analgesic. One may also use bicarbonate in small amounts by the rectum, by hypodermoclysis or by intravenous injection. Intermittent treatment acts as a prophylactic.

DR. JOHN RUHRÄH, Baltimore: The proper management of the diet during the interval does do some good. If the condition is due to an excess of fats, proteids or carbohydrates, we certainly do some good by eliminating the offending substance. There are attacks due to reflex nervous conditions which are recurrent and it is difficult to say what the basis of these are.

DR. J. H. MASON KNOX, Baltimore: In certain cases in older children atropin pushed to the physiologic limits in connection with other measures will be found to be effective.

DR. WILLIAM P. NORTHRUP, New York: I have had cases which were led on to complete recovery by massage, after other measures had failed.

DR. CHARLES GILMORE KERLEY, New York: I realize that there may be a starvation of carbohydrates and sugars, but an excess of sugar brings about just as bad results as too little. I have found physical therapeutics a most valuable adjunct in the treatment of recalcitrant cases. The class of cases of which I have spoken are not cases of anaphylaxis, but answer better to the description of acidosis as accepted

at the present time. I do not know why the diet in the interval would not be of benefit.

The Artificial Cooling of Sick Rooms in Summer

DR. HENRY HEIMAN, New York: Thirteen selected patients were placed in a cooled room and the treatment given them was similar to that given any ordinary case of enteritis.

The average temperature of the room was 69 F. for forty-two days and ranged from 63 to 74 F., and at all times from 5 to 11 degrees below the outside air. The relative humidity was very much the same as that of the outside air, but the absolute humidity was diminished by the cooling. The air was filtered, washed and cooled by cooling coils. We have gained the impression that in this ward the children were more comfortable, cried less, and looked less sick and parched. This method is not applicable to moribund and premature babies, but is suitable for all others.

DISCUSSION

DR. HENRY I. BOWDITCH, Boston: We had a similar plant installed at a great expense, but the fan was a long way off from the coil room and as a consequence the ducts became clogged with dust and we have given up its use.

DR. FRITZ B. TALBOT, Boston: Dr. Bowditch forgot to say that we tried to start the apparatus one day and the dust was very annoying and resulted in 75 per cent. of the children and all the nurses in the ward getting infectious colds.

DR. B. S. VEEDER, St. Louis: We have a room cooled by refrigerating pipes arranged along one side of the room; in this way the atmosphere is cooled without cold air coming into the room.

DR. SAMUEL S. ADAMS, Washington, D. C.: As confirmatory of the benefit of cooling a room I may cite the case of a boy under my care. The temperature was about 90 F. and by means of an electric fan driving the air over a cake of ice the temperature of the room was kept down to 75 F. When the temperature was allowed to rise the boy went into coma. It was finally decided to take him to a cool place and when we got him to an elevation in New York state the change in his condition was strikingly beneficial.

DR. HENRY L. K. SHAW, Albany, N. Y.: At St. Margaret's Hospital we have a five-dollar cooling plant consisting of a pipe rigged up to drip water on a sheet.

Primary Splenomegaly in an Infant

DR. J. H. MASON KNOX, JR., and DR. H. J. WAHL, Baltimore: The patient is an infant 11 months of age who has never thrived and weighs 11 pounds. He is one of a family of eleven children, three of whom died in infancy. Six are well and range in age from 20 to 4 years. The patient showed a general malnutrition associated with idiopathic enlargement of the spleen, liver and lymph-nodes and peculiar yellowish pigmentation of the skin of the exposed parts. The blood picture was normal until a few days before death when it assumed the appearance characteristic of lymphatic leukemia. At autopsy the liver, spleen and the lymphoid tissues were very much enlarged and firm. Histologically there was more or less disappearance of the lymphoid elements, which were largely replaced by large swollen, rounded or polygonal cells with small nuclei and abundant foamy appearing cytoplasm. The affected organs showed a variable amount of iron-containing pigment. In this case the large cells apparently arise from both the endothelium and the reticulum. The picture in the spleen resembles that first described by Gaucher in 1882. The condition suggests a systemic disease of the lymphohematopoietic tissues, but apparently any reticulated tissue may be involved. The condition is very probably related to other blood diseases.

Case of Gaucher's Disease

DR. CHARLES HERRMAN, New York: The patient was a boy, 14 years of age, in whom the disease had been running a chronic course since he was 4 years of age. There was marked enlargement of the spleen, moderate enlargement of the liver, no distinct enlargement of the lymph-nodes, persistent leukopenia with a tendency to epistaxis, discoloration of the face, especially around the nose and a wedge-shaped thickening of the conjunctiva on either side of the cornea. The size of the liver and spleen did not change materially during the seven years that the patient was under observation. As the disease progressed the blood showed a marked decrease in the percentage of hemoglobin, from 75 to 45 per cent.; a slight decrease in the number of red blood-cells, from 4,390,000 to 3,400,000; a constant leukopenia with a decrease in the percentage of polymorphonuclear leukocytes from 20 to 48 per cent. As a result of the operation, besides a marked improvement in the general condition, there was an increase in the hemoglobin from 40 to 55 per cent., in the red blood-cells from 3,400,000 to 4,000,000, and a much more marked increase in the polymorphonuclear leukocytes, from 48 to 75 per cent.

Some Results of Thymus Extirpation

DR. JOHN HOWLAND, DR. E. A. PARK and DR. R. D. MCCLURE, Baltimore: The results of our experiments thus far fail to show that the thymus is essential to life. Some of our thymectomized animals have shown retardation in the development of such extent that at the end of six months they were not much more than one-half the size of the controls, but are nevertheless active, healthy looking, normally formed animals. No changes of a rachitic nature have been found. We feel certain in the belief that the thymus gland in dogs is not essential to life and that the changes which result from its removal are not of so gross a nature as has been reported in recent work, which has come particularly from Germany.

DISCUSSION

DR. ALFRED FRIEDLANDER, Cincinnati: It is difficult to extirpate the thymus completely, for in certain instances there are accessory thymi and these easily regenerate and take the place of the original thymus and they affect the results of the experiment. Thymectomy in a human being is exceedingly dangerous, and there is no absolute indication for doing it. The operative method has given a mortality of 33 per cent. while the method of shrinking the thymus with the Roentgen ray in twenty-seven cases has proved simple and safe, there being but one death among the twenty-seven cases. We are justified in claiming that in the Roentgen ray we have a means of treating enlarged thymi just as effective and much safer than thymectomy.

DR. E. A. PARK, Baltimore: In regard to the difficulty of completely extirpating the thymus, we have looked for these rests and believe their presence has been greatly exaggerated as we have not found them. As to the operative removal of the thymus, this ought not to be so difficult; of course one cannot remove it entirely without entering the thorax. As performed by Dr. Halstead the operation is simple and ought not to be attended with great danger.

Treatment of the Late Type of Hereditary Syphilis

DR. BORDEN S. VEEDER and DR. R. C. JEANS, St. Louis: The treatment we have evolved consists of a combination of neosalvarsan and mercury. The neosalvarsan is dissolved in 1 c.c. of freshly distilled water for each decigram and injected intravenously into any available vein. We have given up the muscular injections because of the pain and discomfort. Neosalvarsan fulfils certain essential requirements for use with children which salvarsan does not. For the treatment of acute lesions neosalvarsan is more effective than inunctions of mercury. We have given some 200 intravenous injections of neosalvarsan and have never noticed any bad or unpleasant effects, except nausea and vomiting in a few instances. In chronic cases of the late type, in which there are such lesions as cerebrospinal syphilis or interstitial keratitis we have been able to secure but little permanent effect from neosalvarsan. The Wassermann reaction is stronger in hereditary lues than in any other form of syphilis and hence it is correspondingly more difficult to make negative. In order to obtain lasting results it is necessary to combine the salvarsan with long and intensive mercurial treatment. No case can be looked on as cured until a negative Wassermann has been obtained and has remained negative without treatment for some time.